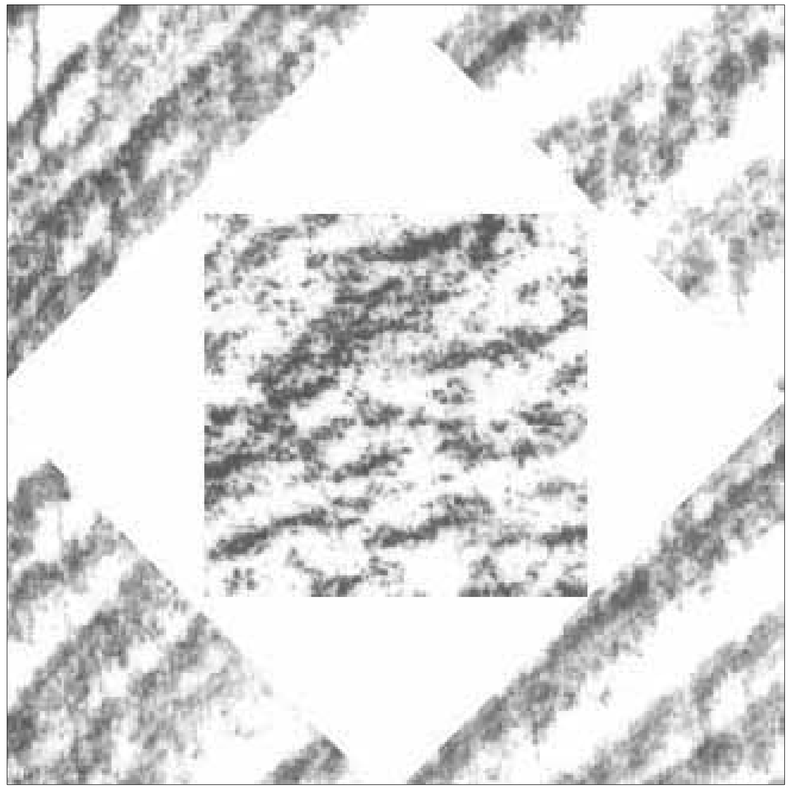

STORES & RECEIVING BUILDING EXPANSION / RENOVATION PHASE 2

Weber State University

State of Utah–Department of Administrative Services

DIVISION OF FACILITIES CONSTRUCTION AND MANAGEMENT

4110 State Office Building/Salt Lake City, Utah 84114/538-3018

GRAPHIC SYMBOLS

DTL# SHT# — BLDG. ELEV. SYMB.

DTL# SHT# — BLDG. SECT. SYMB.

DTL# SHT# — WALL SECT. SYMB.

— KEYED NOTE SYMB.

T.O. ELEV — DATUM PT. SYMB.

ELEV — SPOT ELEV. SYMB.

RM NAME / RM# / F/B W/W — RM. NAME/NUMB RM. FINISH SYMB.

F/N ELEV — CEIL. FINISH/ELEV. SYMB.

DTL# SHT# — DETAIL REF. SYMB.

DTL# SHT# — INTR. ELEV. SYMB.

DR# HW# — DOOR/HDWR. SYMB.

WIN# — WINDOW SYMB.

CODE ANALYSIS

APPLICABLE CODES

	Year		Year
International Building Code	2003	National Electrical Code	2005
International Mechanical Code	2003	Uniform Code for Building Conservation	N/A
International Plumbing Code	2003	ADA Accessibility Guidelines	1994
International Fire Code	2003		
International Energy Conservation Code	2003		

A. Occupancy and Group: B S1 F1

Change in Use: Yes ____ No X Mixed Occupancy: Yes ____ No X

Special Use and Occupancy (e.g. High Rise, Covered Mall): N/A

B. Seismic Design Category: N/A Design Wind Speed: N/A mph

C. Type of Construction (circle one):

I A | I B | II A | II B | III A | III B | IV HT | V A | (V B)

D. Fire Resistance Rating Requirements for the Exterior Walls based on the fire separation distance (in hours):

North: N/A South: N/A East: N/A West: N/A

E. Mixed Occupancies: NO Nonseparated Uses: YES

F: Sprinklers:

Required: NO Provided: YES Type of Sprinkler System: WET

G: Number of Stories: 2 Building Height: 21'-4"

H: Actual Area per Floor (square feet): 1st = 16,100 2nd = 7,344

I: Tabular Area: S1 = 9,000 F1 = 8,500

J: Area Modifications:

a) $A_a = A_1 + \left[\frac{A_1 I_f}{100}\right] + \left[\frac{A_1 I_s}{100}\right]$ $\quad I_f = 100\left[\frac{F}{P} - 0.25\right]\frac{W}{30}$

30,960 = 9,000 + [(9,000) + (44) / 100] $\quad$ 44 = 100[361/522 - 0.25]30/30

b) Sum of the Ratio Calculations for Mixed Occupancies:

$\frac{\text{Actual Area}}{\text{Allowable Area}} \leq 1$

c) Total Allowable Area for:

1) One Story: 23,240
2) Two Story: $A_a(2)$ 58,480
3) Three Story: $A_a(3)$ N/A

d) Unlimited Area Building: Yes ____ No X Code Section: ____

K. Fire Resistance Rating Requirements for Building Elements (hours).

Element	Hours	Assembly Listing	Element	Hours	Assembly Listing
Exterior Bearing Walls	N/A		Floors - Ceiling Floors	N/A	
Interior Bearing Walls	N/A		Roofs - Ceiling Roofs	N/A	
Exterior Non-Bearing Walls	N/A		Exterior Doors and Windows	N/A	
Structural Frame	N/A		Shaft Enclosures	N/A	
Partitions - Permanent	N/A		Fire Walls	N/A	
Fire Barriers	N/A		Fire Partitions	N/A	
			Smoke Partitions		

L. Design Occupant Load: 80

Exit Width Required: 16" Exit Width Provided: 216"

M. Minimum Number of Required Plumbing Facilities:

a) Water Closets - Required (m) 1 (f) 1 Provided (m) 2 (f) 2
b) Lavatories - Required (m) 1 (f) 1 Provided (m) 2 (f) 2
c) Bath Tubs or Showers: N/A
d) Drinking Fountains: 1 Service Sinks: 1

FOOTNOTES:

1) In case of conflict with the U.S. Department of Justice Federal Registers Parts I through V - ADA Guidelines and specific reference to the International Building Code Accessibility Chapters, the more restrictive requirement shall govern.

2) Additional Code Information shall be provided at the discretion of the Building Official for Complex Buildings. Including, but not limited to:
   a) High Rise Requirements.
   b) Atriums.
   c) Performance Based Criteria.
   d) Means or Egress Analysis.
   e) Fire Assembly Locator Sheet.
   f) Exterior and Interior Accessibility Route.
   g) Fire Stopping, Including Tested Design Number.

DRAWING INDEX

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ECE
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801-521-8007/FAX-521-8057

GENERAL ABBREVIATIONS

ACT.	ACCOUSTIC CEILING TILE	EXIST.	EXISTING	MATL.	MATERIAL	RET.	RETAINING
ALT.	ALTERNATE	EQ.	EQUAL	MAS.	MASONRY	REV.	REVISED
ALUM.	ALUMINUM	EQUIP.	EQUIPMENT	MAINT.	MAINTENANCE	R.	RISER
A.B.	ANCHOR BOLT	EXIST.	EXISTING	MFR.	MANUFACTURER	R.D.	ROOF DRAIN
&	AND	EXP.	EXPANSION	M.H.	MANHOLE	RM.	ROOM
ARCH.	ARCHITECTURAL	EXT.	EXTERIOR	M.O.	MASONRY OPENING	R.O.	ROUGH OPENING
@	AT OR AT THE			MAX.	MAXIMUM		
		FIN.	FINISH	MECH.	MECHANICAL	SCHED.	SCHEDULE
BM.	BEAM	F.A.	FIRE ALARM	MEMB.	MEMBRANE	SEAL.	SEALANT
BLK.	BLOCK	F.E.	FIRE EXTINGUISER	MEN	MENS TOILET	SECT.	SECTION
BLKG.	BLOCKING	F.E.C.	F.E. CABINET	METL./MET.	METAL	S.SK.	SERVICE SINK
BD.	BOARD	FLR./FL.	FLOOR	MIN.	MINIMUM	SHT.	SHEET
BOT.	BOTTOM	F.D.	FLOOR DRAIN	MIR.	MIRROR	SIM.	SIMILAR
BLDG.	BUILDING	F.O.S.	FACE OF STUD	MISC.	MISCELLANEOUS	SL./SLP.	SLOPE
		F.O.W.	FACE OF WALL	MTD.	MOUNTED	S.C.	SOLID CORE
CPT.	CARPET	FTG.	FOOTING	MUL.	MULLION	SPEC.	SPECIFICATIONS
CLKG.	CAULKING	FDN.	FOUNDATION			SQ.	SQUARE
C.I.	CAST IRON	F.F.	FINISH FLOOR	NOM.	NOMINAL	STD.	STANDARD
CLG.	CEILING			N.	NORTH	STL.	STEEL
CEM.	CEMENT	GALV	GALVANIZED	N.I.C.	NOT IN CONTRACT	STOR.	STORAGE
CTR.	CENTER	G.I.	GALVANIZED IRON	N.T.S.	NOT TO SCALE	STRUCT	STRUCTURAL/STRUCTURE
CL	CENTER LINE	GA.	GAUGE	NO.	NUMBER	SYM.	SYMMETRICAL
CER.	CERAMIC	GL.	GLASS				
C.T.	CERAMIC TILE	GR.	GRADE	OR #	ORDINATE NUMBER	T.B.R.	TO BE REMOVED
CLR.	CLEAR (ANCE)	GND.	GROUND	OFF.	OFFICE	TEL.	TELEPHONE
CLO.	CLOSET	GYP. BD.	GYPSUM BOARD	O.C.	ON CENTER	TEMP.	TEMPORARY / TEMPERED
COL.	COLUMN	GWB	GYPSUM WATERPROOF BOARD	OPNG.	OPENING	THK.	THICK (NESS)
CONC.	CONCRETE			OPP.	OPPOSITE	T & G	TONGUE AND GROOVE
CMU	CONCRETE MASONRY UNIT	H.D.P.E.	HIGH DENSITY POLYETHYLENE	OPP. H.	OPPOSITE HAND	T/CONC	TOP OF CONCRETE
CMP	CORRUGATED METAL PIPE	HDW#	HARDWARE GROUP #	O.D.	OUTSIDE DIAMETER	T/CURB	TOP OF CURB
CONN.	CONNECTION	HDWD.	HARDWOOD	O.R.D.	OVERFLOW ROOF DRAIN	T.O. FTG.	TOP OF FOOTING
CONSTR.	CONSTRUCTION	HT.	HEIGHT			T.O.P.	TOP OF PLATE
CONT.	CONTINUE/CONTINUOUS	H.P.	HIGH POINT	PTD.-E	PAINTED EPOXY	T/WALL	TOP OF WALL
CONTR.	CONTRACTOR	HORIZ.	HORIZONTAL	PTD.	PAINTED	T.	TREAD
C.J.	CONTROL JOINT	H.B.	HOSE BIBB	PR.	PAIR	TYP.	TYPICAL
CORR.	CORRIDOR	H.M.	HOLLOW METAL	PART.	PARTITION		
CNTR.	COUNTER	HR.	HOURS (FIRE RATING)	PED.	PEDESTRIAN	UNF.	UNFINISHED
CTSK.	COUNTERSUNK			PLAS.	PLASTER	U.N.O.	UNLESS NOTED OTHERWISE
		IN.	INCH	P. LAM.	PLASTIC LAMINATE		
DET.	DETAIL	I.D.	INSIDE DIAMETER	PL.	PLATE	VAR.	VARY OR VARIES
DEPT.	DEPARTMENT	INSUL.	INSULATION	PLYWD.	PLYWOOD	VERT.	VERTICAL
DIA.	DIAMETER	INT.	INTERIOR	PT.	POINT	V.T.R.	VENT THROUGH ROOF
DIM.	DIMENSION	I.E.	INVERT ELEVATION			VCT	VINYL COMPOSITION TILE
DN.	DOWN	INV.		Q.T.	QUARRY TILE		
D.S.	DOWNSPOUT					W/	WITH
DWG.	DRAWING	JAN.	JANITOR	RAD.	RADIUS	W.A.S.	WELDED ANCHOR STUD
D.F.	DRINKING FOUNTAIN	JT.	JOINT	R.B.	RUBBER BASE	WD.	WOOD
		J-BOX	JUNCTION BOX	R.W.L.	RAIN WATER LEADER	WP.	WATERPROOF
E.	EAST			R.F.F.	REFERENCE FINISH FLOOR	W.SCT.	WAINSCOT
EA.	EACH	KIT.	KITCHEN	REFL.	REFLECTED	W/O	WITHOUT
ELEC.	ELECTRIC (AL)			REINF.	REINFORCING	W.P.	WORKING POINT
ELEV./EL.		LAM.	LAMINATE	REQ.	REQUIRED	W.R.	WATER RESISTANT
		LAV.	LAVATORY			W.I.	WROUGHT IRON
		LT.	LIGHT				
		L.P.	LOW POINT				

MATERIALS LEGEND

EARTH — GRAVEL

SAND — CONCRETE

CONCRETE W/ ARCH. FINISH — CAST STONE

CMU — MARBLE

BRICK — GRANITE

LIMESTONE — STONE

WOOD (BLOCKING) — PLYWOOD

WOOD FRAMING — WOOD FINISH

STEEL — ALUMINUM

RIGID INSULATION — BATT INSULATION

PLASTER — ACOUSTICAL TILE

COMPRESSIBLE FILLER — BACKER ROD AND FILLER

METAL LATH — GYPSUM BOARD

FENCE — TO REMOVE

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CONSULTANT

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PROPERTY ID#: 4016

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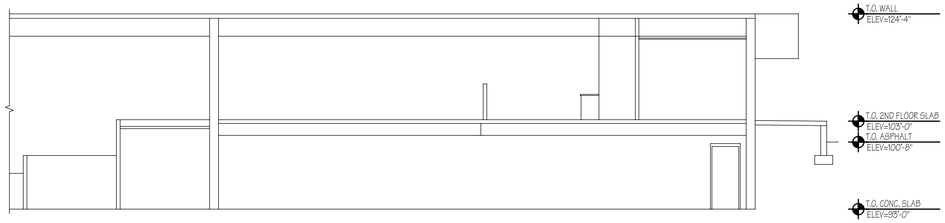
CHECKED BY:	BWS
DESIGNED BY:	RLS
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

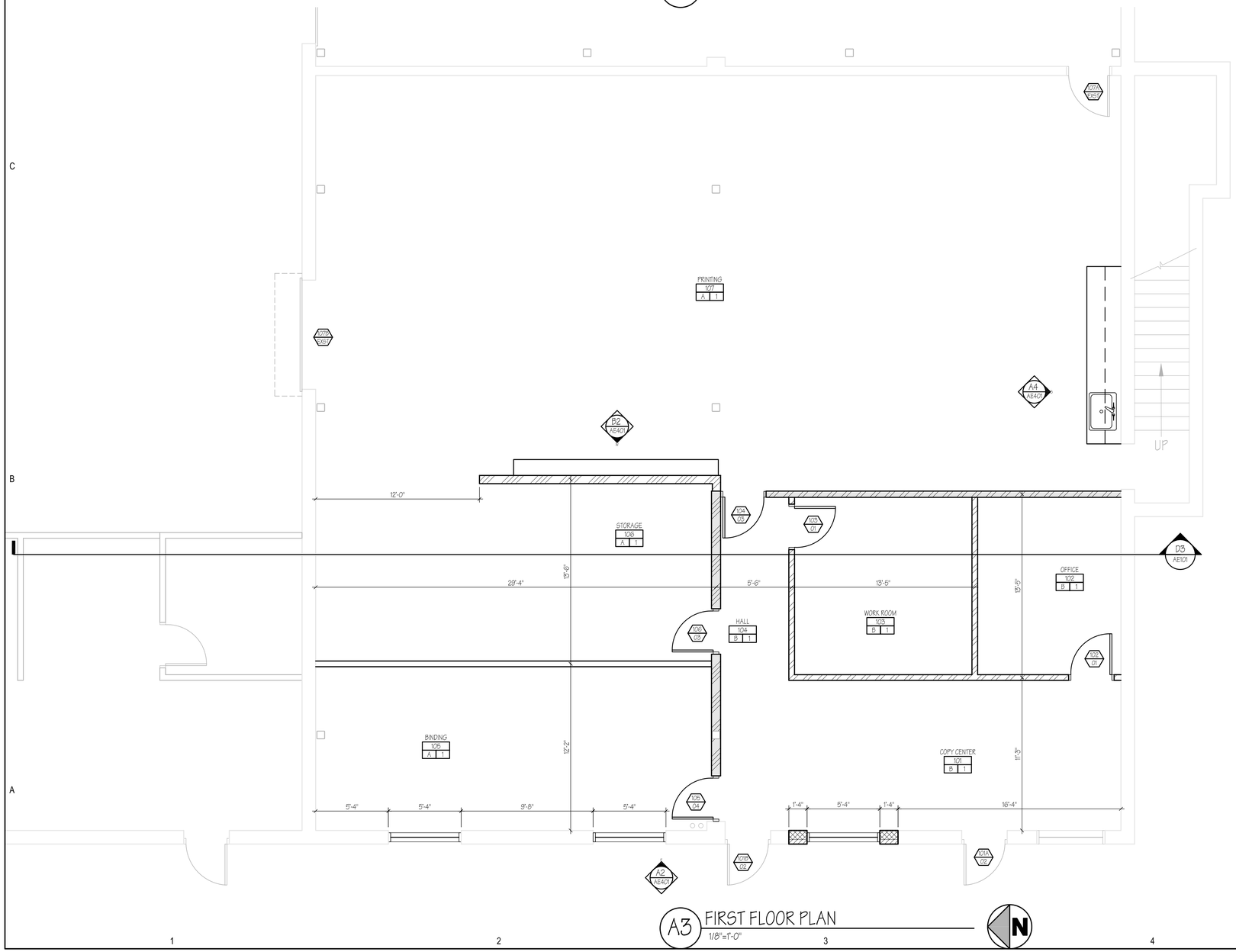
COVER SHEET, GENERAL INFO, & SHEET INDEX

GI100

SHEET 1 OF 17



D3 PARTIAL BUILDING SECTION
1/8"=1'-0"



A3 FIRST FLOOR PLAN
1/8"=1'-0"

GENERAL NOTES

1. ALL DIMENSIONS & EXISTING CONDITIONS IN AREAS OF WORK ARE TO BE FIELD VERIFIED PRIOR TO COMMENCING WORK - ANY DISCREPANCIES ARE TO BE REPORTED TO THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO COMMENCING WORK.

2. PROTECT ALL AREAS & SURFACES ADJACENT TO DEMOLITION & CONSTRUCTION. PATCH & REPAIR ANY DAMAGE OR HOLES IN WALLS, CEILINGS & FLOORS RESULTING FROM THE DEMOLTION OF EXISTING ITEMS OR THE CONSTRUCTION OF NEW ITEMS.

3. NOTED AREAS INDICATED THE GENERAL EXTENT OF DEMOLITON. THE CONTRACTOR'S CHOICE OF MEANS & METHODS OF CONSTRUCTION MAY REQUIRE MORE OR LESS DEMOLITION. THE MEANS & METHODS OF DEMOLITION & CONSTRUCTION MUST BE ACCOUNTED FOR IN THE CONTRACTORS BID. ANY DEMOLITION & REPAIR TO ADJACENT SURFACES BEYOND THE AREAS INDICATED IN THE CONTRACT DOCUMENTS WILL NOT BE COMPENSATED FOR AFTER THE BID OPENING.

4. PRIOR TO THE START OF DEMOLTION, THE CONTRACTOR IS TO MEET WITH THE OWNER & ARCHITECT TO IDENTIFY ALL ITEMS TO BE DEMOLISHED & REMOVED FROM SITE, ITEMS TO BE REMOVED & RETURNED TO THE OWNER, OR ITEMS TO BE REMOVED & REINSTALLED.

5. 72-HOUR NOTICE IS REQUIRED FOR ANY UTILITY SHUT DOWN.

6. PRIOR TO BIDDING, THE CONTRACTOR IS TO SURVEY THE EXISTING WALL CONDITIONS. ALL EXISTING NAILS, SCREWS, ABANDONED FASTENERS & HARDWARE IN THE WALLS INDICATED TO REMAIN ARE TO BE REMOVED & THE HOLES PATCHED. IN ADDITION, ALL DAMAGE TO EXISTING WALLS IS TO BE PATCHED & REPAIRED AS PART OF THE BASE BID.

7. ANY REPAINTING OF SURFACES REQUIRED DUE TO DAMAGE TO FINISHES DURING DEMOLITION AND CONSTRUCTION MUST BE COMPLETE FROM CORNER TO CORNER.

FINISH LEGEND

ROOM NAME
RM NUM
FLOOR / BASE — F | W — WALL/WAINSCOT

A. EXISTING CONCRETE FLOOR W/ NEW 4" RUBBER BASE

B. NEW CARPET W/ NEW 4" RUBBER BASE

1. PAINT NEW WALLS

PARTITION LEGEND

- EXISTING MASONRY WALL TO REMAIN, TYPICAL
- EXISTING STUD WALL TO REMAIN, TYPICAL
- EXISTING EXTERIOR WALL INFILL (PLYWOOD) TO BE DEMOLISHED, TYPICAL
- NEW 6" METAL STUD WALL W/ 5/8" GYPSUM BOARD BOTH SIDES CONTINUOUS TO STEEL DECK ABOVE , TYPICAL
- NEW 3-5/8" METAL STUD WALL W/ 5/8" GYPSUM BOARD BOTH SIDES CONTINUOUS TO STEEL DECK ABOVE, TYPICAL
- NEW 6" METAL STUD WALL W/ SOUND BATT, RESILLENT CHANNEL, 5/8" GYPSUM BOARD BOTH SIDES CONTINUOUS TO STEEL DECK ABOVE, TYPICAL
- NEW 3-5/8" METAL STUD WALL W/ SOUND BATT, RESILLENT CHANNEL, 5/8" GYPSUM BOARD BOTH SIDES CONTINUOUS TO STEEL DECK ABOVE, TYPICAL
- NEW EIFS WALL INFILL, TYPICAL
- NEW 4'-0" HIGH BRACED PONY WALL W/ 3-5/8" METAL STUDS & 5/8" GYPSUM BOARD ON BOTH SIDES & TOP, PROVIDE 2Ø L3x3'x3/16" WELDED TO 3-1/2'x3-1/2'x3/8" PLATE, TOP & BOTTOM, ANCHOR WITH (2) TWO 1/2" ANCHOR BOLTS WITH MINIMUM 4" EMBEDMENT, TYPICAL

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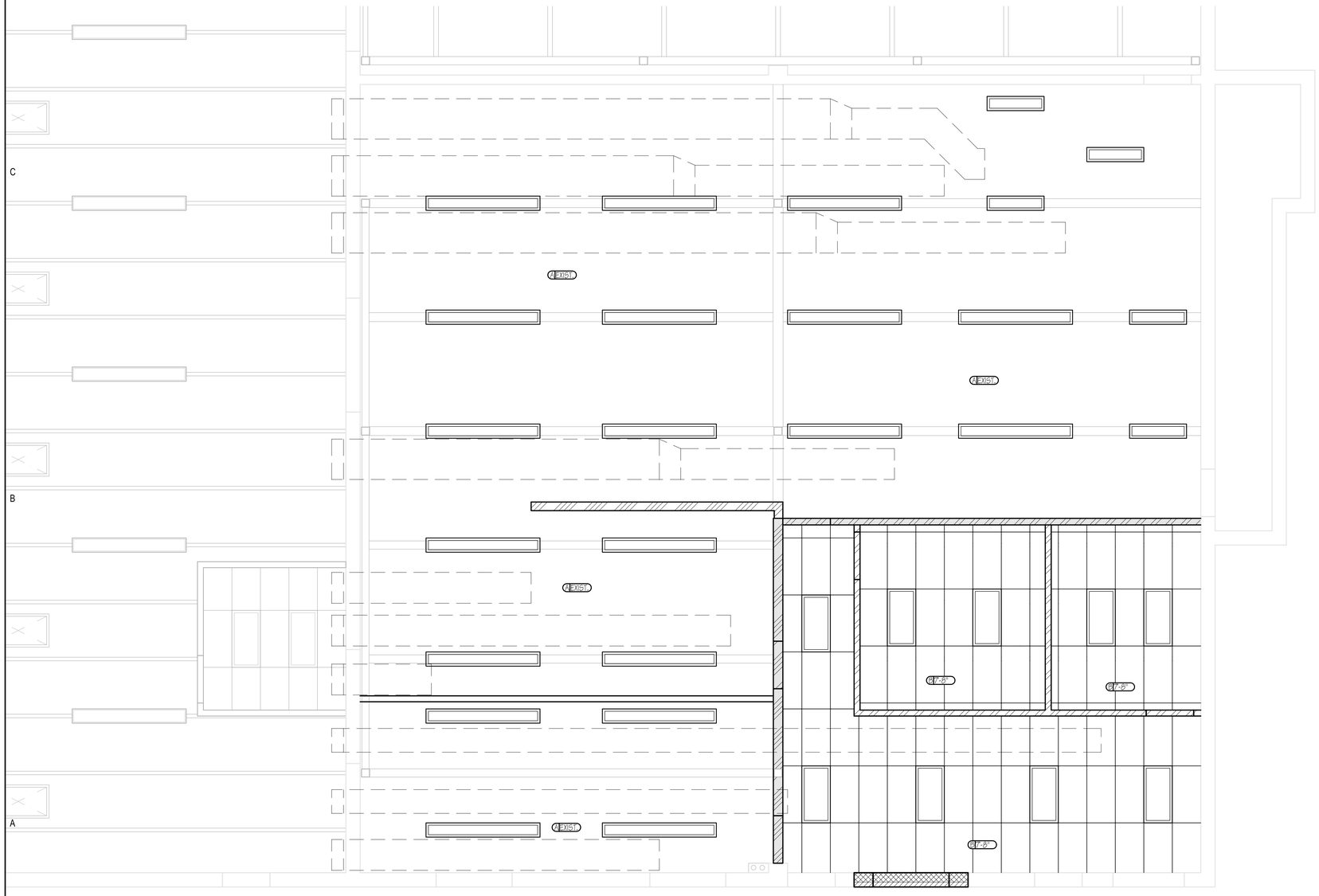
CHECKED BY:	BWS
DESIGNED BY:	RLS
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

FIRST FLOOR PLAN

AE101

SHEET 3 OF 17



A3 FIRST FLOOR REFLECTED CEILING PLAN
1/8"=1'-0"

N

CEILING FINISH LEGEND

CEILING FINISH — A9'-0" — CEILING ELEVATION

A. EXISTING, REPAINT AREAS DAMAGED DURING CONSTRUCTION & INSTALLATION OF PIPING, DUCTWORK, LIGHTING, ETC.

B. NEW SUSPENDED 2X4 CEILING GRID SYSTEM W/ ACOUSTICAL PANELS

CEILING PLAN LEGEND

- NEW 2X4 SUSPENDED CEILING SYSTEM W/ LAY-IN ACOUSTIC PANELS
- NEW LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS
- NEW LIGHT FIXTURE, SEE ELECTRICAL DRAWINGS
- NEW MECHANICAL GRILLE, SEE MECHANICAL DRAWINGS
- NEW MECHANICAL GRILLE, SEE MECHANICAL DRAWINGS
- EXISTING SKYLIGHT TO REMAIN
- EXISTING LIGHT FIXTURE TO REMAIN, SEE ELECTRICAL DRAWINGS

PARTITION LEGEND

- EXISTING MASONRY WALL TO REMAIN, TYPICAL
- EXISTING STUD WALL TO REMAIN, TYPICAL
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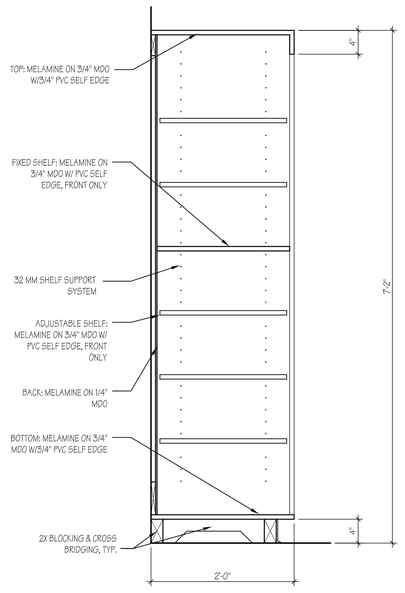
SHEET TITLE

FIRST FLOOR REFLECTED CEILING PLAN

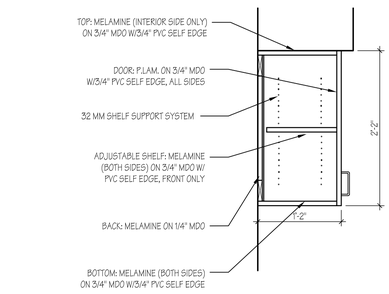
AE111

SHEET 4 OF 17

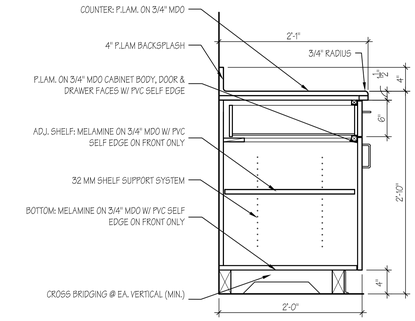
B2 INTERIOR ELEVATION
1/4"=1'-0"



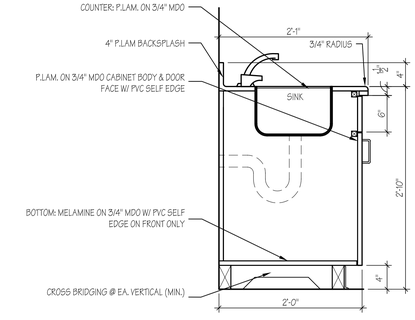
B4 CASEWORK DETAIL
1"=1'-0"



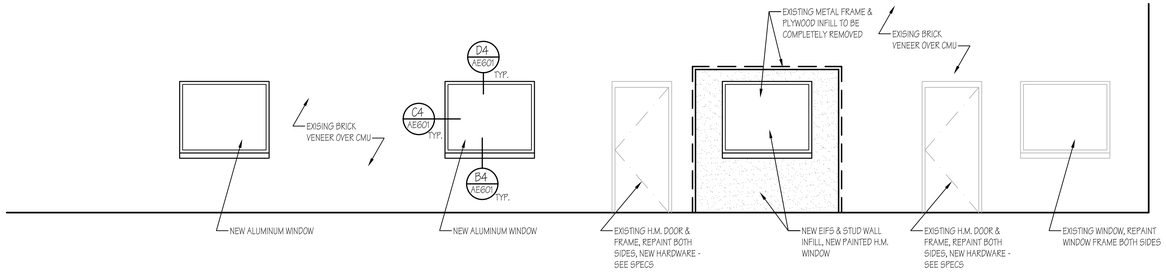
D5 CASEWORK DETAIL
1"-1'-0"



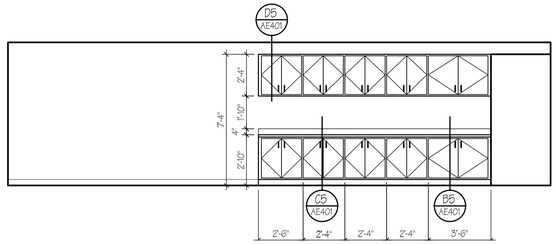
C5 CASEWORK DETAIL
1"-1'-0"



B5 CASEWORK DETAIL
1"-1'-0"



A2 INTERIOR ELEVATION
1/4"=1'-0"



A4 INTERIOR ELEVATION
1/4"=1'-0"

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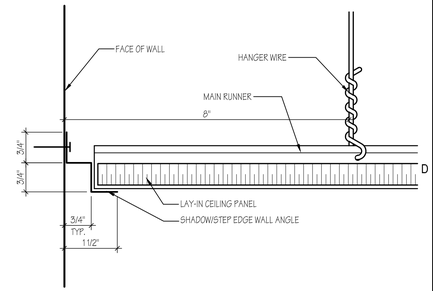
SHEET TITLE

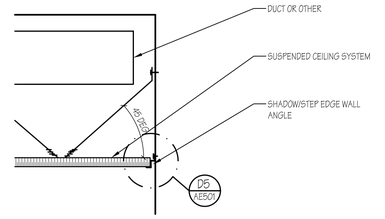
INTERIOR ELEVS. & CASEWORK DETAILS

AE401

SHEET 5 OF 17

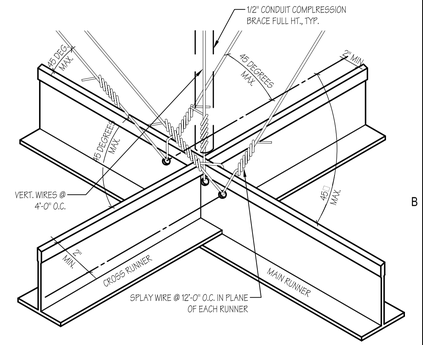


D5 CEILING DETAIL
6"=1'-0"

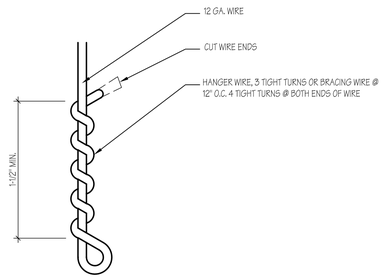


NOTE: WHEN DUCT OR OTHER OBSTRUCTION PREVENTS SPLAY WIRE ATTACHED AT CEILING, OR IF 45□ CANNOT BE ACHIEVED THE USE OF SIDEWALL MAY BE USED.

C5 CEILING DETAIL
2"=1'-0"

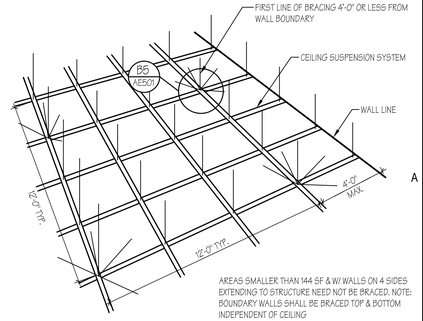


B5 CEILING DETAIL
N.T.S.



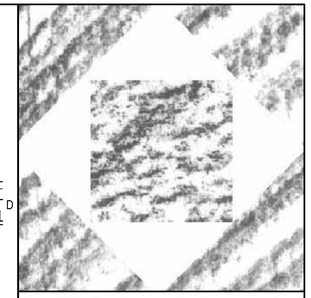
SUSPENDED ACOUSTICAL CEILING HANGER OR BRACE WIRE

A4 CEILING DETAIL
1"=1"



AREAS SMALLER THAN 144 SF & W/ WALLS ON 4 SIDES EXTENDING TO STRUCTURE NEED NOT BE BRACED. NOTE: BOUNDARY WALLS SHALL BE BRACED TOP & BOTTOM INDEPENDENT OF CEILING

A5 CEILING DETAIL
N.T.S.



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Weber State University
Ogden, Utah

PROPERTY ID#: 4016

MARK	DATE	DESCRIPTION

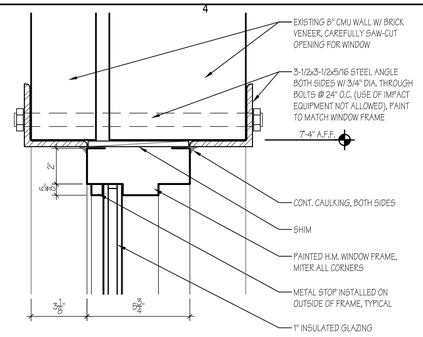
DATE:	28 DECEMBER 2006
AGENCY PROJECT NO:	05276810
HFSA PROJECT NO:	0528.02
CAD DWG FILE NO:	
DRAWN BY:	RLS
CHECKED BY:	BWS
DESIGNED BY:	RLS
DWG TYPE:	ARCHITECTURAL
ARCHITECTURAL PHASE:	CONSTRUCTION BID SET

SHEET TITLE

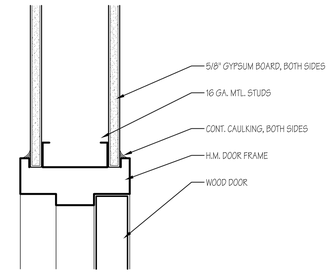
CEILING & MISCELLANEOUS DETAILS

AE501

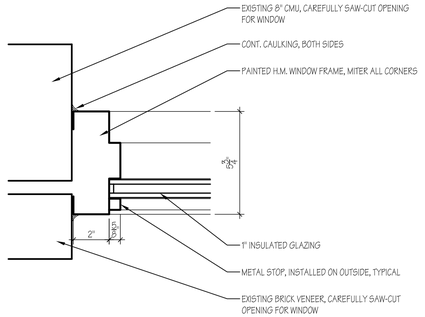
SHEET 6 OF 17



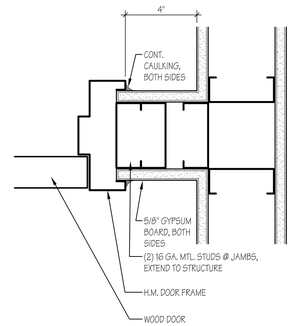
D4 H.M. WINDOW HEAD DETAIL
3"=1'-0"



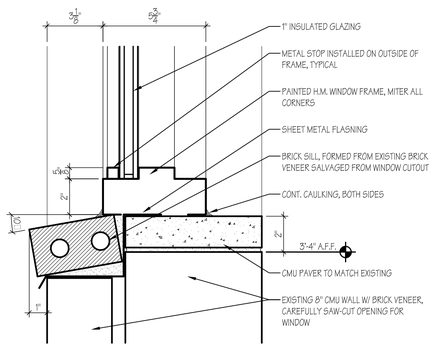
D5 H.M. DOOR HEAD DETAIL
3"=1'-0"



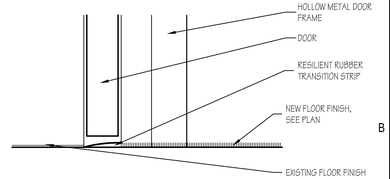
C4 H.M. WINDOW JAMB DETAIL
3"=1'-0"



C5 H.M. DOOR JAMB DETAIL
3"=1'-0"



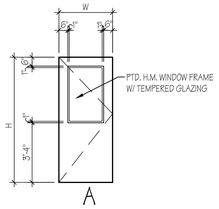
B4 H.M WINDOW SILL DETAIL
3"=1'-0"



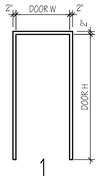
B5 DOOR THRESHOLD DETAIL
3"=1'-0"

DOOR SCHEDULE

DOOR NUMB.	DOOR						FRAME						
	TYPE	MATERIAL	FIINISH	DOOR SIZE			TYPE	MATERIAL	FINISH	UL LABEL	DETAILS		
				W	H	T					H	J	T
101A	EXISTING	H.M.	RE-PAINT	N/A	N/A	N/A	EXISTING	H.M.	RE-PAINT	N/A	N/A	N/A	SEE SPEC
101B	EXISTING	H.M.	RE-PAINT	N/A	N/A	N/A	EXISTING	H.M.	RE-PAINT	N/A	N/A	N/A	SEE SPEC
102	A	S.C. WOOD	PRE. FIN.	3'-0"	7'-0"	1-3/4"	1	H.M.	PAINT	--	D5/AE601	C5/AE601	--
103	A	S.C. WOOD	PRE. FIN.	3'-0"	7'-0"	1-3/4"	1	H.M.	PAINT	--	D5/AE601	C5/AE601	--
104	A	S.C. WOOD	PRE. FIN.	3'-0"	7'-0"	1-3/4"	1	H.M.	PAINT	--	D5/AE601	C5/AE601	B5/AE601
105	A	S.C. WOOD	PRE. FIN.	3'-0"	7'-0"	1-3/4"	1	H.M.	PAINT	--	D5/AE601	C5/AE601	B5/AE601
106	A	S.C. WOOD	PRE. FIN.	3'-0"	7'-0"	1-3/4"	1	H.M.	PAINT	--	D5/AE601	C5/AE601	B5/AE601
107A	EXISTING	H.M.	RE-PAINT	N/A	N/A	N/A	EXISTING	H.M.	RE-PAINT	N/A	N/A	N/A	N/A
107B	EXISTING						EXISTING						



A2 DOOR TYPES
1/4"=1'-0"



A3 FRAME TYPES
1/4"=1'-0"

A4 DOOR SCHEDULE
N.T.S.

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SHEET TITLE

DOOR SCHEDULE, DOOR & WINDOW DETAILS

AE601

SHEET 7 OF 17

LEGEND OF MECHANICAL SYMBOLS AND ABBREVIATIONS

MECHANICAL

- POSITIVE PRESSURE DUCT – RISE
- POSITIVE PRESSURE DUCT – DROP
- NEGATIVE PRESSURE DUCT – RISE
- NEGATIVE PRESSURE DUCT – DROP
- ROUND DUCT – RISE
- ROUND DUCT – DROP
- UNDER FLOOR DUCT
- TURNING VANES
- FRESH AIR LOUVER
- RELIEF AIR OR EXHAUST AIR LOUVER
- 12X12 / 200 — CEILING SUPPLY DIFFUSER
- 22X22 / 200 — CEILING RETURN REGISTER
- 12X12 / 200 — CEILING EXHAUST REGISTER, (BALANCE TO MATCH SUPPLY IF RETURN CFM IS NOT SHOWN)
- 24X10 / 200 — SIDEWALL SUPPLY REGISTER
- 24X10 / 200 — SIDEWALL EXHAUST OR RETURN REGISTER
- 12X12 / 200 — CEILING SUPPLY DIFFUSER WITH FLEXIBLE DUCT
- 12X12 / 200 — CEILING AIR GRILLE WITH FLEXIBLE DUCT

  TOP FIGURES INDICATE NECK SIZE. BOTTOM FIGURE INDICATES CFM.
- CEILING RETURN AIR GRILE W/ SOUND BOOT
- 3-1" SLOTS, 48, 400 — LINEAR DIFFUSER WITH PLENUM AND FLEXIBLE DUCT CONNECTION. NO. OF SLOTS & SIZE OF SLOT ON TOP, ACTIVE LENGTH AND CFM ON BOTTOM
- FLEXIBLE DUCT CONNECTION
- FLEXIBLE DUCT
- FAN
- 12/8 FO — FLAT OVAL DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
- 12/8 — RECTANGULAR DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
- 12ø — ROUND DUCT WITH NET INSIDE DIMENSIONS SHOWN IN INCHES.
- UP — INCLINED RISE
- DN — INCLINED DROP

  WITH RESPECT TO AIR FLOW 15° NOMINAL INCLINE WITH RADIUS TURNS=DEPTH OF DUCT.
- W, R — R/W=1. ROUND DUCT SIMILAR TO RECTANGULAR
- 12/12, 8/8 — RECTANGULAR TO RECTANGULAR OR ROUND TO ROUND DUCT TRANSFORMATION MAXIMUM 15° INCLUDED ANGLE EXCEPT WHERE SHOWN OTHERWISE.
- 12/12, 12ø — RECTANGULAR TO ROUND DUCT TRANSFORMATION
- R — BRANCH DUCT SPLIT WITH 6" WIDTH AND MIN. R=WIDTH OF BRANCH DUCT DOWNSTREAM. ELBOW TURNING VANE OPTIONAL.
- 45°, 1.50, 2.50, D — TAP ENTRY AREA EQUALS 150% OF BRANCH AREA
- 12ø, 12/12 — HIGH EFFICIENCY FITTING
- MANUAL VOLUME DAMPER
- FD — FIRE DAMPER IN DUCT, W/ ACCESS PANEL REQD.
- FSD — COMBINATION FIRE/SMOKE DAMPER W/ ACCESS PANEL
- SD — SMOKE DAMPER W/ ACCESS PANEL
- BDD — BACK DRAFT DAMPER
- ATC, OR — ATC DAMPER
- AD — ACCESS PANEL IN DUCT OR PLENUM
- HEATING OR COOLING COIL IN DUCT
- SINGLE DUCT AIR TERMINAL BOX VARIABLE OR CONSTANT VOLUME. MIN. 1-1/2 TERMINAL INLET SIZE STRAIGHT DUCT AT TERMINAL INLET.
- 4-WAY BLOW PATTERN
- 3-WAY BLOW PATTERN
- 2-WAY BLOW PATTERN
- 2-WAY BLOW PATTERN
- 1-WAY BLOW PATTERN
- SD — DUCT SMOKE DETECTOR
- UNIT HEATER

PLUMBING

- FLOOR SINK
- FLOOR DRAIN
- FCO / COTG — FLOOR CLEAN-OUT OR CLEAN-OUT TO GRADE
- ROOF DRAIN
- DOWNSPOUT NOZZLE
- ARROW INDICATES DIRECTION OF FLOW IN PIPE
- CHECK VALVE
- PRESSURE REDUCING, EXTERNAL PRESSURE VALVE
- PRESSURE REDUCING, SELF CONTAINED VALVE
- ATC VALVE – 2 WAY
- ATC VALVE – 3 WAY
- SOLENOID VALVE
- GATE VALVE
- GATE VALVE – NON RISING STEM
- GLOBE VALVE
- TEMPERATURE AND PRESSURE TEST PORT
- PS — PRESSURE SWITCH
- GAS COCK
- 65 GPM — CALIBRATED BALANCING VALVE WITH GPM INDICATED
- RPBP — FLOW CONTROL VALVE
- BRANCH – BOTTOM CONNECTION
- BRANCH – TOP CONNECTION
- BRANCH – SIDE CONNECTION
- RISE OR DROP
- RISER – DOWN (ELBOW)
- RISER – DOWN (ELBOW)
- VTR — VENT THRU ROOF
- WATER HAMMER ARRESTOR
- INLINE PUMP
- INLINE PUMP
- CLEAN-OUT
- RELIEF VALVE
- ANGLE VALVE
- FLOW METER
- UNION
- BALANCING COCK
- SHUT-OFF COCK FOR USE WITH PRESSURE GAUGE
- FLEXIBLE EXPANSION JOINT
- THERMOMETER – TEMP RANGE AS INDICATED
- PRESSURE GAUGE WITH SHUT-OFF COCK
- PRESSURE GAUGE WITH PIGTAIL
- LATERAL STRAINER WITH BLOW-OFF VALVE, PROVIDE HOSE END WITH CAP WHERE DISCHARGE IS NOT PIPED TO DRAIN
- BALL VALVE (PIPE SIZES 2" AND SMALLER) BUTTERFLY VALVE (PIPE SIZES 2-1/2" AND LARGER)
- MOTOR OPERATED BUTTERFLY VALVE
- VALVE IN RISE
- AIR VENT–MANUAL
- AIR VENT–AUTO
- FLOW SWITCH
- REDUCER
- CONCENTRIC REDUCER
- ECCENTRIC REDUCER

PLUMBING CONT.

- HOSE BIBB
- PIPE CAP
- SWITCH
- SENSOR
- THERMOSTAT
- TN — NIGHT THERMOSTAT
- FILL PORT
- DRAIN PAN AND P-TRAP
- (NAME) — FIXTURE FROM LEVEL ABOVE
- GPM, LB/HR — FLOW METER ORIFICE
- FLANGE
- 90° ELBOW
- 45° ELBOW
- F&T — STEAM TRAP, F&T=FLOAT & THERMOSTATIC B=BUCKET, T=THERMOSTATIC
- DN — LEADER INDICATES DOWNWARD SLOPE
- DEMOLITION
- ALIGNMENT GUIDE
- AHCHOR

SYMBOLS

- P-1 — PLUMBING FIXTURES
- POINT OF CONNECTION
- A / M-101 — SECTION TAG – TOP FIGURE IS SECTION NO. BOTTOM FIGURE IS SHEET NO.
- A / M101 — DETAIL TAG – TOP FIGURE IS DETAIL NO. BOTTOM FIGURE IS SHEET NO.
- EF / 1 — EQUIPMENT IDENTIFICATION
- 1 — KEYED NOTE IDENTIFICATION

FIRE

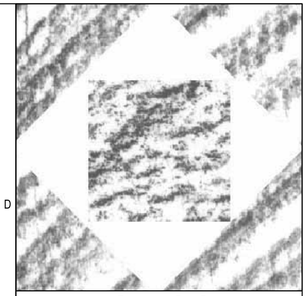
- HOSE VALVE
- NRS GATE VALVE WITH SUPERVISION
- FLOW SWITCH
- FIRE RISER
- SPRINKLER HEAD
- F — FIRE SPRINKLER WATER

LINETYPES

- AV — ACID VENT
- AW — ACID WASTE
- BBD — BOILER BLOW DOWN
- BF — BOILER FEED WATER
- B — BRINE
- CO2 — CARBON DIOXIDE
- CA — COMPRESSED AIR
- CF — CHEMICAL FEED
- CHWS — CHILLED WATER SUPPLY
- CHWR — CHILLED WATER RETURN
- CS — CONDENSER WATER SUPPLY
- CR — CONDENSER WATER RETURN
- DOMESTIC COLD WATER (DCW)
- DOMESTIC HOT WATER (DHW)
- DOMESTIC HOT WATER RETURN (DHWR)
- DI — DEIONIZED WATER SUPPLY
- DIR — DEIONIZED WATER RETURN
- E(NAME) — EXISTING PIPING
- (NAME) — EXISTING PIPING TO BE REMOVED
- GHR — GLYCOL HEAT RECOVERY PIPING
- G(NAME) — GLYCOL PIPING SOLUTION
- FOR — FUEL OIL RETURN
- FOS — FUEL OIL SUPPLY
- FOV — FUEL OIL VENT
- C — NATURAL GAS
- HG — HOT GAS
- HFR — HELICOPTER FUEL RETURN
- HFS — HELICOPTER FUEL SUPPLY
- HP(NAME) — HIGH PRESSURE DOMESTIC WATER
- HPC — HIGH PRESSURE CONDENSATE
- HPS — HIGH PRESSURE STEAM
- HWR — HEATING HOT WATER RETURN
- HWS — HEATING HOT WATER SUPPLY
- IA — INSTRUMENT AIR
- IA 120 — INSTRUMENT AIR AT PRESSURE INDICATED
- LA — LAB AIR
- LV — LAB VACUUM
- LPC — LOW PRESSURE CONDENSATE
- LPG — LIQUIFIED PETROLEUM GAS
- LPS — LOW PRESSURE STEAM
- MA — MEDICAL AIR
- MA 120 — MEDICAL AIR AT PRESSURE INDICATED
- MPC — MEDIUM PRESSURE CONDENSATE
- MPS — MEDIUM PRESSURE STEAM
- MUW — MAKE UP WATER
- MV — MEDICAL VACUUM
- N — NITROGEN
- N2O — NITROUS OXIDE
- OX — MEDICAL OXYGEN
- OX 120 — MEDICAL OXYGEN AT PRESSURE INDICATED
- PUMPED CONDENSATE

LINETYPES CONT.

- RO — REVERSE OSMOSIS WATER SUPPLY
- ROR — REVERSE OSMOSIS WATER RETURN
- RD — ROOF DRAIN
- RDO — ROOF DRAIN OVERFLOW
- RL — REFRIGERANT LIQUID
- RS — REFRIGERANT SUCTION
- SEWER (BELOW GRADE)
- SEWER (ABOVE GRADE)
- SW — SOFT DOMESTIC WATER (SW)
- V — VACUUM
- VENT (SEWER)



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STATE OF UTAH

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Weber State University
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PROPERTY ID#: 4016

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DESIGNED BY:	
DWG TYPE:	MECHANICAL
ARCHITECTURAL PHASE:	100% CONSTRUCTION DRAWINGS

SHEET TITLE

FIRST FLOOR HVAC PLAN

M001

SHEET 7 OF 17

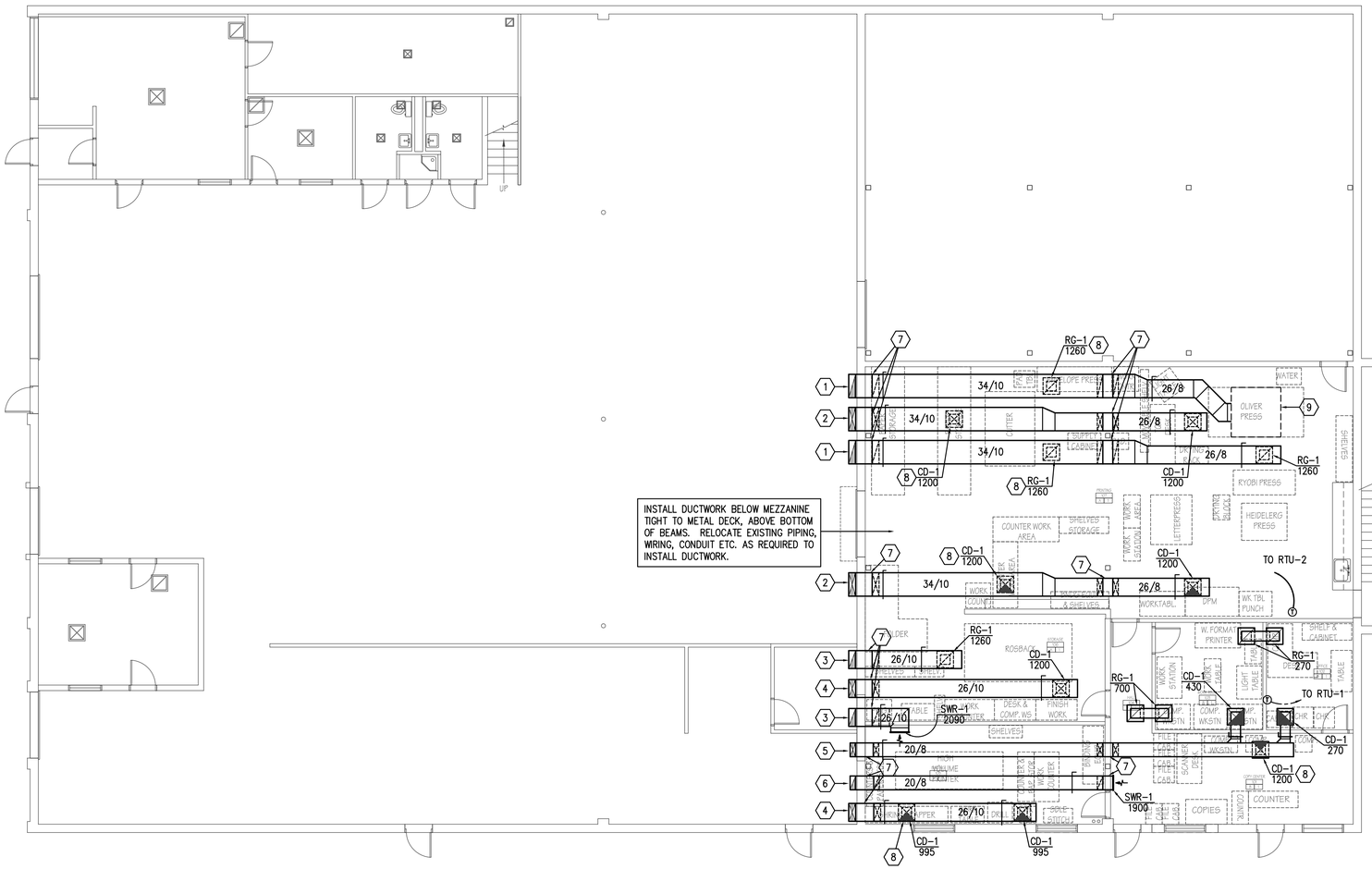
PACKAGED ROOFTOP UNIT SCHEDULE

ID	MANUFACTURER	MODEL	SUPPLY FAN AIRFLOW RATE (CFM)	SUPPLY FAN EXTERNAL STATIC PRESSURE (IN. WATER)	HEATING SECTION HEATING LOAD (BTU/H)	HEATING SECTION ENTERING/ LEAVING AIR TEMP. (°F)	HEATING SECTION MEDIUM	COOLING SECTION COOLING LOAD (BTU/H)	COOLING SECTION ENTERING AIR TEMP. DB/WB (°F)	COOLING SECTION LEAVING AIR TEMP. DB/WB (°F)	COOLING SECTION MEDIUM	FILTER EFFICIENCY	ELECTRICAL TOTAL MCA	ELECTRICAL SUPPLY FAN MOTOR (HP)	ELECTRICAL RELIEF FAN MOTOR (HP)	ELECTRICAL SINGLE POINT VOLT/PH/HZ	NOTES
RTU-1	AAON	RM-A04	1900	1	76,300	70/105	NAT GAS	43,000	77/62	55/54	DX	30	28	1.5	1	208/3/60	1, 2
RTU-2	AAON	RM-025	8000	1	330,000	70/105	NAT GAS	248,000	85/62	51/50	DX	30	140	5	1	208/3/60	1, 2

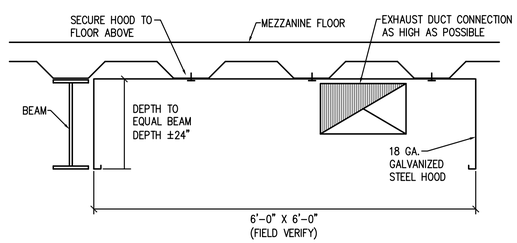
1. COMPLETE WITH CENTRIFUGAL POWER RELIEF
2. ROOF CURB FURNISHED WITH UNIT

KEYED NOTES

1. 34" X 10" RA DUCT UP. SEE SHEET MH102.
2. 34" X 10" SA DUCT UP. SEE SHEET MH102.
3. 26" X 10" RA DUCT UP. SEE SHEET MH102.
4. 26" X 10" SA DUCT UP. SEE SHEET MH102.
5. 20" X 8" SA DUCT UP. SEE SHEET MH102.
6. 20" X 8" RA DUCT UP. SEE SHEET MH102.
7. DROP DUCTWORK BELOW BEAM.
8. PROVIDE BALANCING DAMPER IN DROP.
9. EXHAUST HOOD OVER PRESS. SEE DETAIL.
10. BALANCE TO 1260 CFM.



FIRST FLOOR HVAC PLAN
SCALE: 1/8" = 1'-0"



1 MH101 EXHAUST HOOD DETAIL
SCALE: 1/16" = 1'-0"

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DESIGNED BY:	
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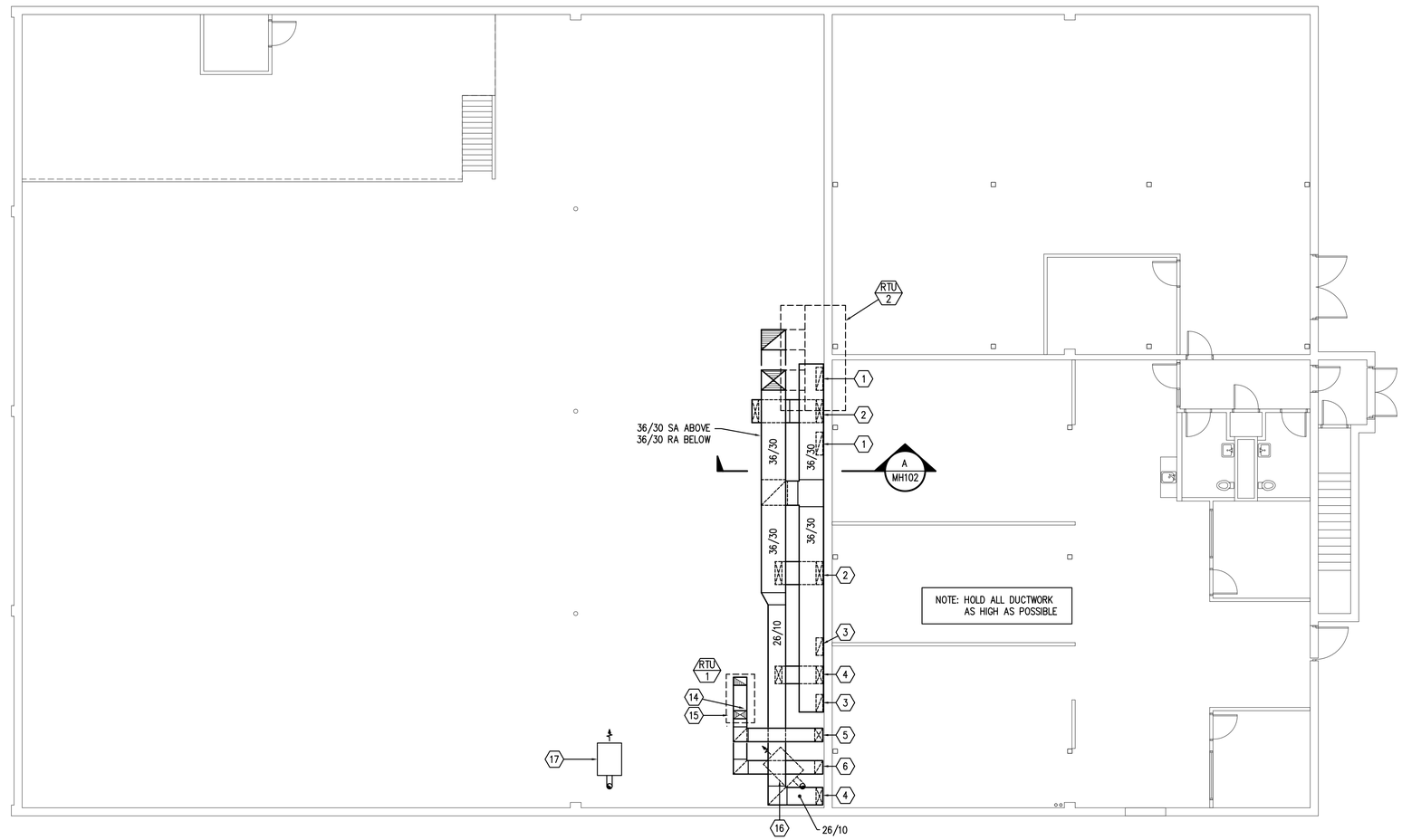
ARCHITECTURAL PHASE:	100% CONSTRUCTION DRAWINGS

SHEET TITLE

FIRST FLOOR HVAC PLAN

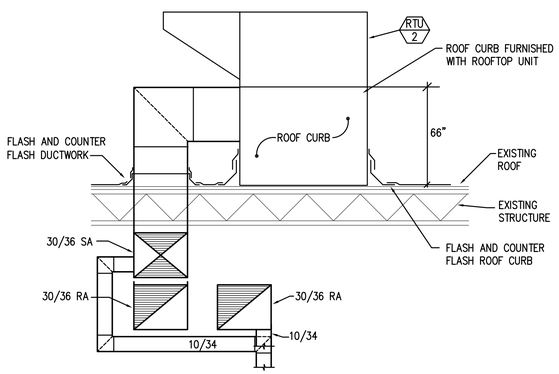
MH101

SHEET 8 OF 17



KEYED NOTES

1. 34/10 RA DOWN. SEE SHEET MH101..
2. 34/10 SA DOWN. SEE SHEET MH101.
3. 26/10 RA DOWN. SEE SHEET MH101.
4. 26/10 SA DOWN. SEE SHEET MH101.
5. 20/8 SA DOWN. SEE SHEET MH101.
6. 20/8 RA DOWN. SEE SHEET MH101.
7. RA DUCT BELOW SUPPLY AIR DUCT.
8. RA BELOW DUCTWORK FROM FROM RTU-1.
9. SLOPE DOWN BELOW RA DUCT.
10. 24" X 90" RA DUCT UP TO RTU.
11. 42" X 64" UP TO RUT ON ROOF. TRANSITION IN CURB AS REQUIRED TO CONNECT TO UNIT.
12. 14" X 38" RA UP TO RTU UNIT.
13. 22" X 38" SA UP TO RTU UNIT.
14. 14" X 34" RA UP TO RTU UNIT.
15. 20" X 20" SA UP TO RTU UNIT.
16. RELOCATE EXISTING GAS FIRED UNIT HEATER AND FLUE THRU ROOF.
17. REINSTALL EXISTING GAS FIRED UNIT HEATER AND FLUE THRU ROOF. EXTEND GAS LINE TO NEW HEATER LOCATION.



A / MH102 ROOFTOP UNIT SECTION
SCALE: 1/4" = 1'-0"

UPPER FLOOR HVAC PLAN
SCALE: 1/8" = 1'-0"

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LICENSED PROFESSIONAL ENGINEER
No. 5484
NEIL H. SPENCER
STATE OF UTAH

STORES & RECEIVING EXPANSION / RENOVATION PHASE 2

Weber State University
Ogden, Utah

PROPERTY ID#: 4016

MARK	DATE	DESCRIPTION

DATE:	Dec. 28, 2006
AGENCY PROJECT NO:	05276810
HFSA PROJECT NO:	0528.02
CAD DWG FILE NO:	
DRAWN BY:	
CHECKED BY:	
DESIGNED BY:	
DWG TYPE:	MECHANICAL

ARCHITECTURAL PHASE:
100% CONSTRUCTION DRAWINGS

SHEET TITLE

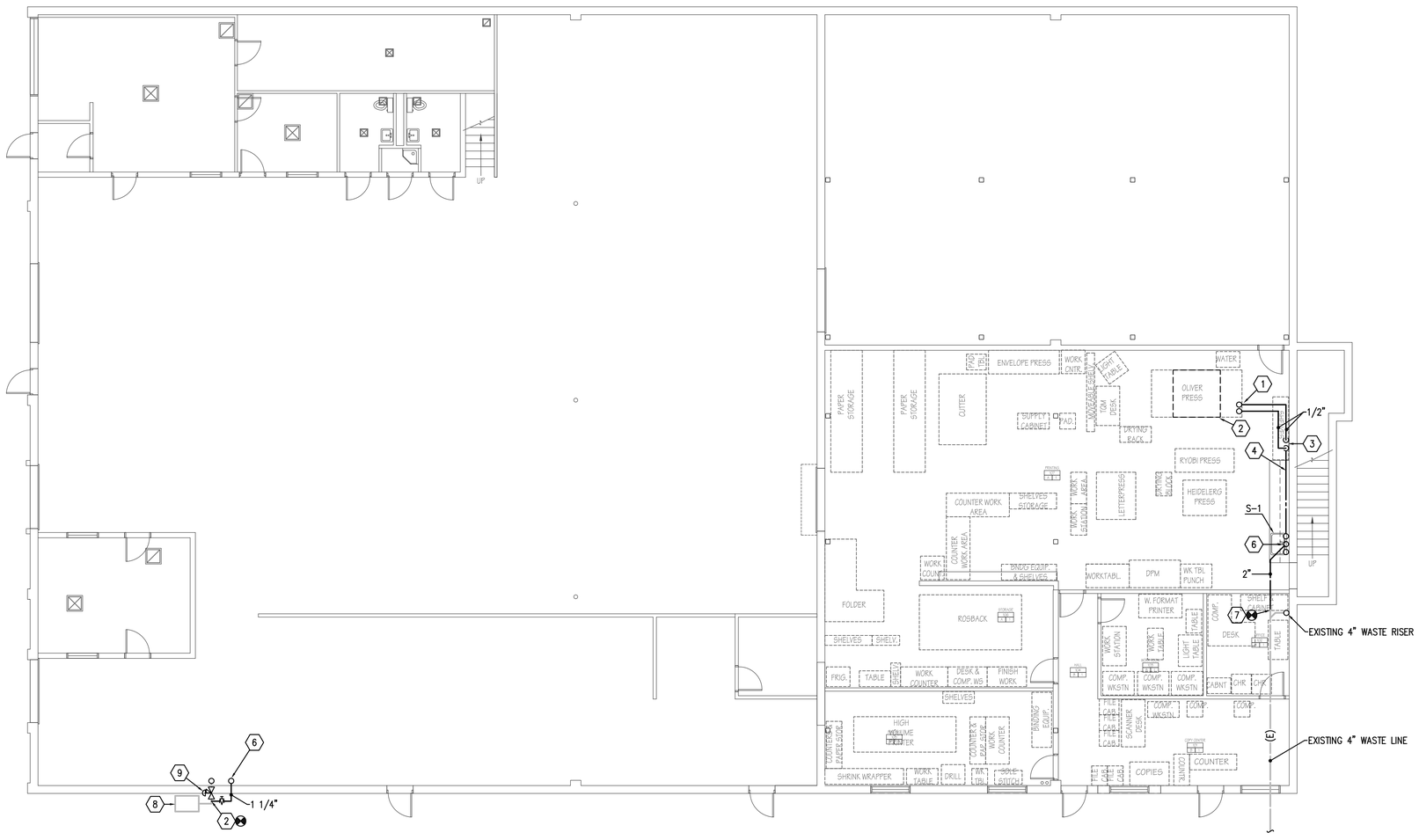
UPPER FLOOR HVAC PLAN

MH102

PLUMBING FIXTURE SCHEDULE

ID	FIXTURE	CW (IN)	HW (IN)	W (IN)	V (IN)	NOTES
S-1	SINK	1/2	1/2	2	1 1/2	COUNTER MOUNTED, SINGLE COMPARTMENT
FH-1	FREEZE-LESS HYDRANT	3/4				

1. ALL UNDER GROUND WASTE AND VENT SHALL BE 2" OR GREATER PER DRAWINGS.



FIRST FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

N

KEYED NOTES

1. 1/2" HW AND CW LINES UP. SEE SHEET PL102.
2. CONNECT TO EXISTING 2" GAS LINE.
3. DROP PIPING DOWN WALL.
4. RUN HW AND CW PIPING BELOW COUNTERTOP TO SINK.
5. PROVIDE AIR ADMITTANCE VALVE AT SINK.
6. 1 1/4" 2 PSIG GAS LINE UP SEE SHEET PL102.
7. CONNECT TO EXISTING 4" WASTE LINE. FIELD VERIFY EXACT LOCATION AND ELEVATION OF EXISTING PIPING PRIOR TO STARTING ANY WORK.
8. REPLACE EXISTING GAS METER WITH NEW GAS METER. ADDITIONAL GAS REQUIREMENT IS 500 CFH. PROVIDE CAPACITY FOR FUTURE LOAD OF 500 CFH. PROVIDE 2 PSIG OUTLET PRESSURE.
9. PROVIDE NEW 2 PSIG TO 4 OUNCE GAS PRESSURE REGULATOR IN EXISTING 2" GAS LINE.
10. CONNECT TO EXISTING 2" GAS LINE.

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SHEET TITLE

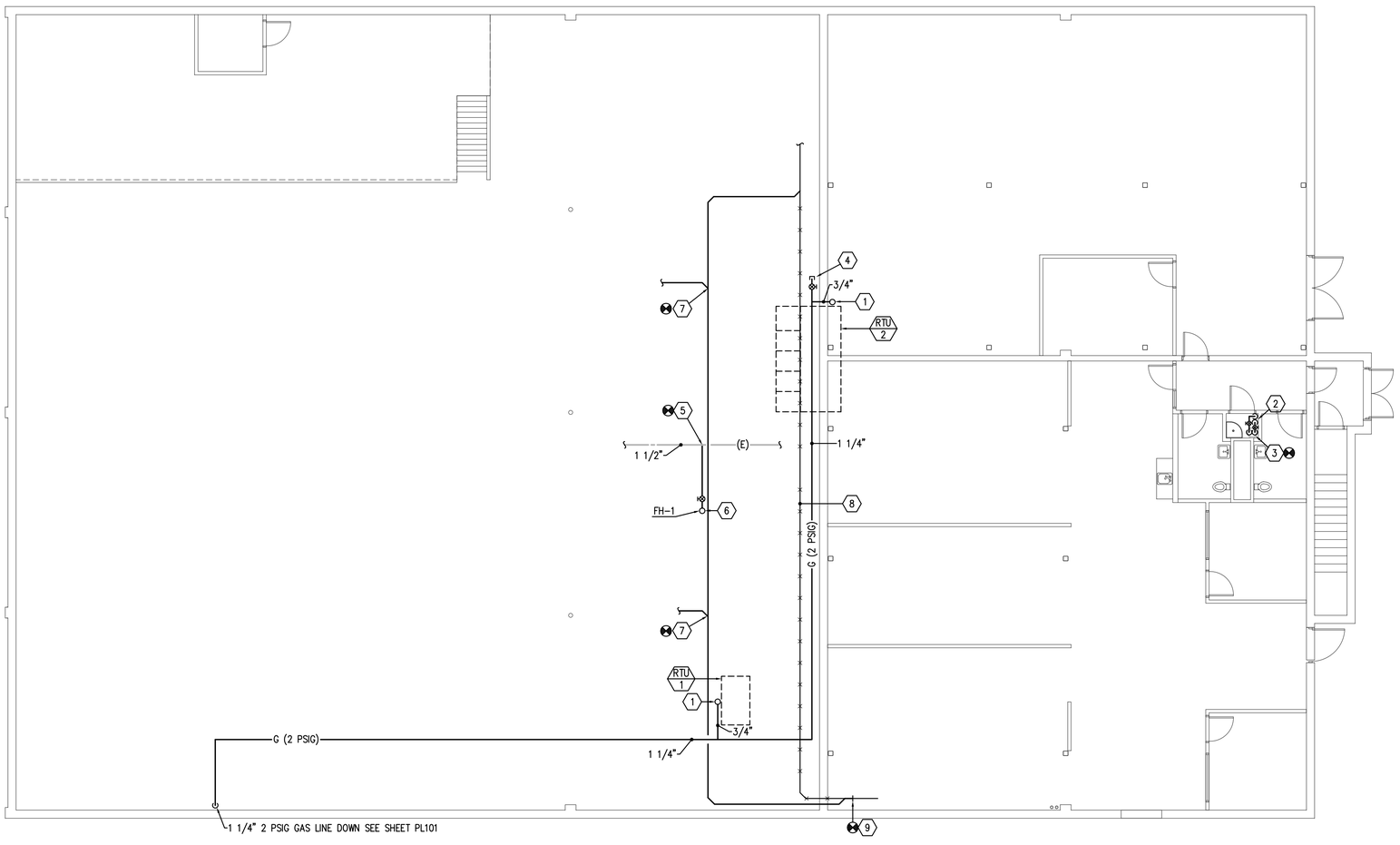
FIRST FLOOR PLUMBING PLAN

PL101

SHEET 10 OF 17

KEYED NOTES

1. GAS LINE UP THROUGH ROOF. PROVIDE SHUT OFF VALVE AND GAS PRESSURE REGULATOR. CONNECT TO ROOFTOP UNIT.
2. 1/2" WATER LINES DOWN. SEE SHEET PL102.
3. CONNECT TO EXISTING 3/4" PIPING AT WATER HEATER.
4. CAP 1" 2 PSIG GAS LINE FOR FUTURE EXTENSION.
5. CONNECT NEW 3/4" CW LINE TO EXISTING 1 1/2" CW LINE.
6. 3/4" UP. TO FREEZELESS HYDRANT AT ROOF.
7. RECONNECT BRANCH ROOF DRAIN LINES TO MAIN LINE. FIELD DETERMINE NUMBER AND SIZE OF BRANCH PIPING.
8. RELOCATE EXISTING ROOF DRAIN LINE. FIELD VERIFY EXACT SIZE, AND LOCATION. NUMBER OF BRANCH CONNECTIONS ETC. PRIOR TO STARTING ANY WORK.
9. CONNECT TO EXISTING ROOF DRAIN PIPING (APPROX. LOCATION).



UPPER FLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

N

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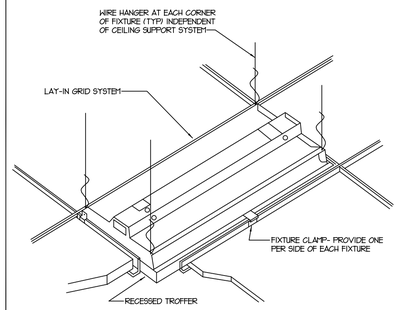
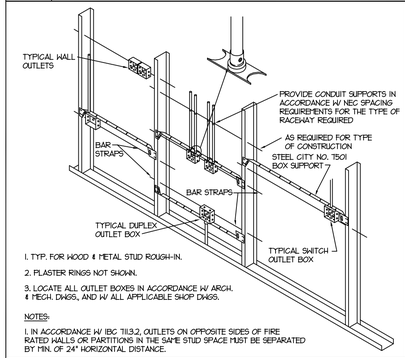
UPPER FLOOR PLUMBING PLAN

PL102



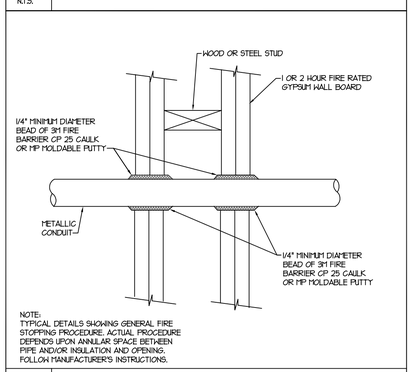
SCALE: N.T.S.

TYPICAL RECESSED FIXTURE MOUNTING DETAIL



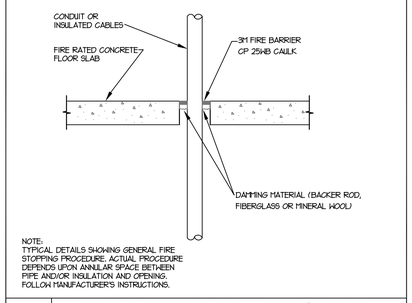
SCALE: N.T.S.

TYPICAL ROUGH-IN REQUIREMENTS DETAIL



SCALE: N.T.S.

FIRESTOP FOR METAL CONDUIT THROUGH GYPSUM WALL BOARD



SCALE: N.T.S.

TYPICAL FIRESTOP FOR CABLES/CONDUIT THROUGH CONCRETE FLOORING

LIGHTING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	LAMPS	APPROVED MANUFACTURERS	CATALOG NUMBER
T-1	8'-0" FLOURESCENT STRIP LIGHT WITH REFLECTOR, CHAIN HANG KIT AND WIRE GUARD. TO MATCH EXISTING.	(4) F030 T-8	LITHONIA	TC230MVOLT GEBI0I5 2HGCUN
			COLUMBIA	CSB-230-EB8LH-I20-2CSRA4-CSHG4
			METALUX	8TSTN-230-I20-TEB8I-SNLSTYI-HG/SN
			LOL	SH8T232HPF-I20-SOHI-2NSTYP485-AHGSH-CSP
T-1A	SAME AS T-1 EXCEPT 4'-0"	(2) F030 T-8	LITHONIA	C23Q MVOLT GEBI0I5 WGCUN
			COLUMBIA	CSA-230EB8LH-I20-CSRA4-CSHG4
			METALUX	STN-230-I20-TEB8I-SNLSTYI-HG/SN
			LOL	SH4S232HPF-I20-SOHI-NSTYP485-AHGSH-CSP
T-2	2' X 4' RECESSED GRID MOUNTED LIGHT FIXTURE WITH FLUSH DOOR AND .125" ACRYLIC PRISMATIC LENS.	3F030 T-8	LITHONIA	2SP8-G332-AI2I25-I20-GEBI0I5
			COLUMBIA	ST824-332G-FSAI2.I25-3EB8LHUNV
			METALUX	2GR8-332AI25-I20-EB8I-U
			LOL	XP2GVI332-UNV-HB-PROGRAM START
T-3	SAME AS T-2 EXCEPT WITH DUAL BALLASTS.	3F030 T-8	LITHONIA	2SP8-G332-AI2I25-I20-(2)GEBI0I5
			COLUMBIA	ST824-332G-FSAI2.I25-EB8LHUNV
			METALUX	2GR8-332AI25-I20-EB82-U
			LOL	XP2GVI332-UNV-HB-PROGRAM (DUAL)
EX-1	GREEN LED EXIT SIGN WITH 90 MINUTE BATTERY PACK.	INCLUDED	LITHONIA	LHQM S W 3 G I20/277 RO
			DUAL-LITE	CV3GEW
			SURE LITES	LPXH70DGWHDH
			LOL	LLNUGW
EX-1A	SAME AS EX-1 EXCEPT WITH REMOTE MOUNTED EXTERIOR LIGHT.	INCLUDED	LITHONIA	LHQM W3G I20/277 ELANXH0606
			DUAL LITES	
			SURE LITES	
			LOL	

NOTES:

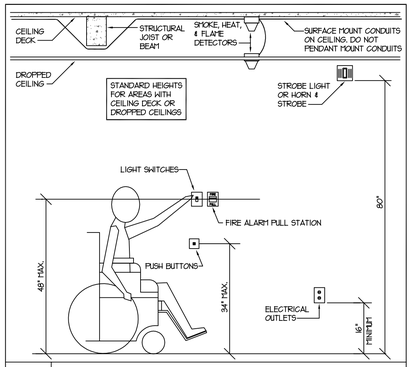
1. ALL FLUORESCENT LIGHTS SHALL HAVE ELECTRONIC PROGRAMMABLE START BALLASTS, 10% TOTAL HARMONIC DISTORTION. UNIVERSAL, ADVANCE AND SYLVANIA ARE APPROVED MANUFACTURERS. BALLASTS TO HAVE 5 YEAR WARRANTY.
2. ALL FLUORESCENT LAMPS SHALL HAVE 4100° COLOR TEMPERATURE.
3. FIELD VERIFY ALL LIGHTING VOLTAGES PRIOR TO PLACING ANY ORDER.
4. THE WRITTEN CRITERIA OF THE FIXTURE DESCRIPTION TAKES PRECEDENCE OVER THE CATALOG NUMBER.
5. PROVIDE PREMIUM T-8 LAMPS AND BALLAST.

MECHANICAL EQUIPMENT SCHEDULE

	NAME OF MECHANICAL EQUIPMENT	ROOF TOP UNIT	ROOF TOP UNIT					
MOTOR DATA	EQUIPMENT NO.	RTU-1	RTU-2	--	--	--	--	--
	RATING/WATTS	--	--	--	--	--	--	--
	VOLTAGE	208	208	--	--	--	--	--
	PHASE	3	3	--	--	--	--	--
	AMPS	20	140	--	--	--	--	--
	WIRE SIZE	3 #8	3 #3/0	--	--	--	--	--
	GROUND WIRE	1 #10	1 #6	--	--	--	--	--
	CONDUIT SIZE	3/4"	1-1/2"	--	--	--	--	--
	FUSE DISC. SW.			--	--	--	--	--
	TYPE RK1 FUSES			--	--	--	--	--
	NON-FUSE SW.	--	--	--	--	--	--	--
	CAPACITOR (KVAR)	--	--	--	--	--	--	--
	NOTES	2	2,3	--	--	--	--	--

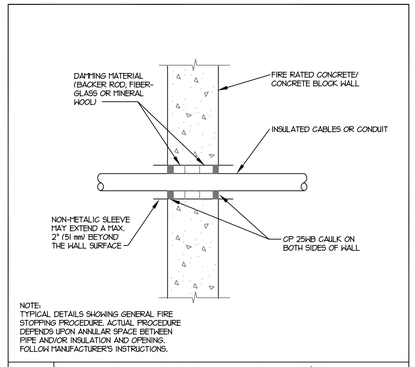
NOTES:

1. PROVIDE THERMAL OVERLOAD SWITCH.
2. STARTER AND DISCONNECT PROVIDED WITH THE UNIT.
3. PROVIDE DUCT DETECTOR IN RETURN DUCT, AND TIE TO FACP. ALSO TIE THE UNIT TO FACP FOR FAN SHUT DOWN.



SCALE: N.T.S.

STANDARD HEIGHTS FOR HANDICAPPED ACCESS



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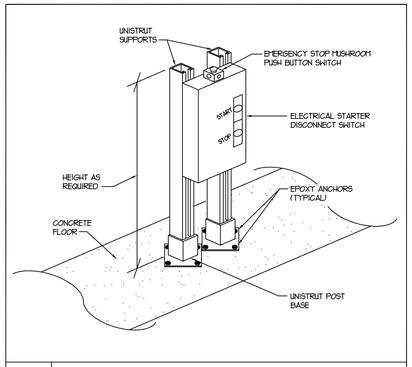
TYPICAL FIRESTOP FOR CABLES/CONDUIT THROUGH CONCRETE WALLS



SCALE: N.T.S.

STARTER SUPPORT DETAIL

POWER SYSTEMS SYMBOL LIST

SYMBOL	DESCRIPTION
	DUPLEX CONVENIENCE OUTLET - 20 AMP
	DUPLEX CONVENIENCE OUTLET - 20 AMP GROUND FAULT INTERRUPTER
	4-PLEX CONVENIENCE OUTLET - 20 AMP
J	JUNCTION BOX - SIZE AND FUNCTION AS REQUIRED
	CONDUITS CONCEALED IN CEILING AND WALLS
	ARROWS INDICATE HOME RUNS
	FUSED DISCONNECT SWITCH - SIZE AS REQUIRED
	MOTOR LOCATION
$T	MANUAL DISCONNECT WITH THERMAL OVERLOAD PROTECTION
	ELECTRICAL PANEL LOCATION
	PUSH BUTTON SWITCH
	POWER POLE
W.P.	
XX-X	MECHANICAL EQUIPMENT CALLOUT
X	REFERENCE NOTE CALLOUT

LIGHTING SYSTEM SYMBOL LIST

SYMBOL	DESCRIPTION
	SURFACE MOUNTED FLUORESCENT FIXTURE
ENL	EMERGENCY NIGHT LIGHT
	FLUORESCENT STRIP LIGHT FIXTURE
	WALL MOUNTED FIXTURE
	EXIT LIGHT. ARROWS SHOW EXIT DIRECTION
	WALL MOUNTED LIGHT FIXTURE
	WALL MOUNTED CAN LIGHT FIXTURE
$	SINGLE POLE TOGGLE SWITCH - 20 AMP
$a,b	SINGLE POLE TOGGLE SWITCH - 20 AMP, LETTERS INDICATE SWITCH ASSIGNMENT
$3	THREE WAY TOGGLE SWITCH - 20 AMP
$4	FOUR WAY TOGGLE SWITCH - 20 AMP
T-X X	LIGHTING FIXTURE CALLOUT. NUMBER INDICATES A SUGGESTED QUANTITY- TO BE VERIFIED

COMMUNICATION SYSTEMS SYMBOL LIST

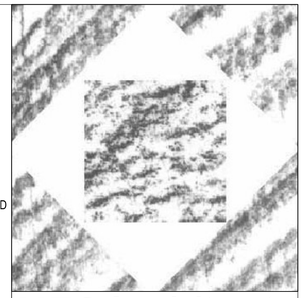
SYMBOL	DESCRIPTION
	TELEPHONE TERMINAL BOARD
	FLUSH TELE/DATA OUTLET BY TELECOMMINICATIONS CONTRACTOR

FIRE ALARM SYSTEM SYMBOL LIST

SYMBOL	DESCRIPTION
SD	FIRE ALARM SYSTEM PHOTOELECTRIC SMOKE DETECTOR
DD	FIRE ALARM PHOTOELECTRIC DUCT DETECTOR
F	FIRE ALARM MANUAL PULL STATION, 48" A.F.F.
H	FIRE ALARM HORN WITH STROBE HIGH DECIBEL, 96" A.F.F.

GENERAL NOTES:

1. IN THE EXISTING SPACES TO BE RENOVATED, THE CONTRACTOR SHALL REMOVE ALL LIGHT FIXTURES, SWITCHES, WIRING, CONDUIT, WIRING DEVICES, FIRE ALARM DEVICES, SPEAKERS, VOLUME CONTROLS, ETC. AS REQUIRED WHETHER OR NOT SHOWN ON THE DRAWINGS. COORDINATE THIS WORK WITH GENERAL CONTRACTOR.
2. ALL MATERIALS TO BE REMOVED AND RETURNED TO THE OWNER. MATERIALS WHICH THE OWNER DECIDES NOT TO KEEP SHALL BE SALVAGED AND REMOVED FROM THE SITE BY THE CONTRACTOR.
3. ALL CONCEALED CONDUIT THAT CANNOT BE REMOVED SHALL BE CUT FLUSH WITH THE FINISH SURFACES AND CAPPED OFF AFTER THE WIRING HAS BEEN DISCONNECTED AT THE PANEL AND REMOVED FROM THE CONDUIT.
4. IN AREAS WHERE CIRCUIT CONTINUITY IS INTERRUPTED, BUT MUST BE MAINTAINED BECAUSE OF THE NATURE OF THE FACILITY, MAKE ALL THE NECESSARY MODIFICATIONS TO THE CIRCUITS IN ORDER TO MAINTAIN THE CIRCUIT INTEGRITY.
5. THE CONTRACTOR SHALL PATCH THE WALLS AND CEILINGS WHERE THE DEVICES ARE REMOVED TO MATCH THE EXISTING WALLS AND CEILINGS.
6. THE COLOR OF ALL THE NEW DEVICES AND COVERPLATES SHALL MATCH THE COLOR OF THE EXISTING DEVICES AND COVERPLATES.
7. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATION OF ALL LIGHTING FIXTURES.
8. THE COLOR OF THE LIGHT FIXTURES SHALL BE SELECTED BY THE ARCHITECT.
9. MINIMUM SIZE OF CONDUIT TO BE 3/4". ALUMINUM CONDUITS SHALL NOT BE USED.
10. USE RIGID STEEL SET SCREW TYPE FITTINGS ONLY. DIE CAST FITTINGS SHALL NOT BE USED.
11. SUPPORT THE LAY-IN TYPE FIXTURES FROM THE CEILING DECK INDEPENDENT OF THE CEILING GRID, AS SHOWN ON THE TYPICAL RECESSED FIXTURE MOUNTING DETAIL.
12. REFER TO THE MECHANICAL SHEETS FOR THE EXACT LOCATION OF THE MECHANICAL EQUIPMENT.
13. ALL NEW WORK MUST MEET THE CURRENT ADOPTED NATIONAL ELECTRICAL CODE.
14. NOT MORE THAN THREE (3) CIRCUITS, SHALL BE INSTALLED IN A CONDUIT. EACH CIRCUIT SHALL CONSIST OF 1 CONDUCTOR FOR EACH PHASE, 1 NEUTRAL, AND 1 GROUND, FOR A TOTAL OF FIVE CONDUCTORS.
15. THE SIZE OF THE NEUTRAL CONDUCTORS SHALL BE NO. 10 AWG FOR ALL HOME RUNS WITH COMMON NEUTRAL (LIGHTING AND POWER CIRCUITS).
16. FOR SPECIFICATION OF PULL WIRES IN EMPTY CONDUITS, REFER TO THE ELECTRICAL SPECIFICATION FOR RACEWAYS SECTION 16111.
17. THE MINIMUM SIZE OF THE CONDUCTORS ARE TO BE #12 AWG THHN COPPER, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
18. DETAILS ARE SHOWN ON DIFFERENT SHEETS. THE CONTRACTOR SHALL REFER TO THOSE DETAILS WHETHER OR NOT CALLED IN REFERENCE NOTES.
19. ALL J-BOXES SHALL HAVE MINIMUM DEPTH OF 2-1/8" UNLESS OTHERWISE SPECIFIED. SECURE ALL J-BOXES AS SHOWN IN THE DETAILS. FURNISH AND INSTALL PROPER MUD RINGS.
20. ALL NEW EXPOSED CONDUIT MUST RUN AGAINST THE WALLS OR CEILINGS. DO NOT PENDANT MOUNT ANY CONDUIT FROM THE CEILINGS.
21. ALL THE HOMERUNS MUST BE ACCESSIBLE. DO NOT CARRY A HOMERUN FROM ONE DEVICE TO ANOTHER WHICH IS TIED TO A SEPARATE HOMERUN INSIDE THE WALL. MARK ON ALL THE J-BOXES THE CIRCUIT NAMES AND NUMBERS. USE NO. 10 THHN CONDUCTORS FOR CONDUCTOR LENGTH OVER 100 FEET, NO. 8 THHN OVER 200 FEET, NO. 6 THHN OVER 300 FEET AND NO. 4 THHN OVER 400 FEET LENGTH.
22. COORDINATE WITH THE OWNER AND ARCHITECT FOR THE EXACT LOCATION OF THE OUTLETS.
23. LIGHT SWITCHES INSTALLED ADJACENT TO EACH OTHER, SHALL BE GANGED TOGETHER WITH ONE PIECE COVERPLATE.
24. AT THE END OF THE JOB, PROVIDE BLANK COVER PLATES TO MATCH THE OTHER COVER PLATES FOR ALL J-BOXES WHERE DEVICES HAVE NOT YET BEEN INSTALLED.
25. ALL MATERIALS USED IN THIS INSTALLATION SHALL BE U.L. APPROVED AND NEW.
26. ALL ELECTRICAL WIRING MUST BE IN CONDUIT (ROMEX AND MC CABLE NOT PERMITTED).
27. FLEXIBLE CONDUITS CAN ONLY BE USED FOR SHORT RUNS (6' MAXIMUM).
28. NO CONDUITS SHALL RUN IN DUCT WORK.
29. TEMPORARY ELECTRICAL SERVICE IS TO BE PROVIDED BY THE ELECTRICAL CONTRACTOR AND REMOVED BY THE ELECTRICAL CONTRACTOR.
30. PRIOR TO SUBMITTING A BID THE ELECTRICAL CONTRACTOR SHALL INSPECT THE SITE AND INCLUDE IN HIS BID PACKAGE ALL CHARGES DUE TO EXISTING CONDITIONS. SHOP DRAWINGS ARE REQUIRED. ALL LABOR, MATERIAL AND WORKMANSHIP SHALL BE GUARANTEED FOR A PERIOD OF 1 YEAR FROM THE DATE OF ACCEPTANCE BY THE TENANT. REPLACE OR REPAIR ALL DEFECTS DURING THE GUARANTEED PERIOD.
31. THE ELECTRICAL CONTRACTOR SHALL TERMINATE THE ELECTRICAL CONNECTIONS TO ALL THE EQUIPMENT BY PROVIDING THE NECESSARY MALE/FEMALE CONNECTOR, RECEPTACLE, PLUG, ETC.
32. ALL DUPLEX OUTLETS AND SWITCHES SHALL BE 20 AMP., 120 VOLT SPEC GRADE. HUBBELL AND PASS & SEYMOUR AND LEVITON ARE APPROVED MANUFACTURERS.
33. THE ELECTRICAL CONTRACTOR SHALL NOTIFY AND COORDINATE WITH THE MECHANICAL CONTRACTOR SO THAT NO PIPING, DUCTS, OR OTHER EQUIPMENT SHALL BE INSTALLED IN ENTRY OR PASS THROUGH ELECTRICAL ROOM OR SPACES ABOVE OR BELOW ELECTRICAL PANELS.
34. ELECTRICAL CONTRACTOR SHALL VERIFY ALL ELECTRICAL LOADS (VOLTAGE, PHASE, CONNECTION REQUIREMENT, ETC.) OF EQUIPMENT FURNISHED UNDER OTHER DIVISIONS WITH APPROVED SHOP DRAWINGS PRIOR TO BEGINNING ROUGH-IN.
35. THE CONTRACTOR SHALL INFORM THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES FOUND BETWEEN THE INTENDED FUNCTION OF EQUIPMENT AND EQUIPMENT SPECIFIED IN THE CONTRACT DOCUMENTS A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO ISSUANCE OF THE FINAL BID. FAILURE TO REPORT ANY DISCREPANCY (CATALOG NUMBERS, DISCONTINUED ITEMS, ETC.) DOES NOT RELIEVE THE CONTRACTOR FROM PROVIDING EQUIPMENT WHICH SHALL CONFORM TO AND FULFILL THE INTENT OF THE CONTRACT DOCUMENTS. NOR SHALL IT BE USED AS A CONDITION TO OBTAIN ADDITIONAL FUNDS FROM THE OWNER AFTER THE CONTRACT IS AWARDED. THE CONTRACTOR SHALL REQUEST ALL CLARIFICATIONS OF CONTRACT DOCUMENT REQUIREMENTS IN WRITING TO THE ARCHITECT/ENGINEER A MINIMUM OF TEN (10) WORKING DAYS PRIOR TO ISSUANCE OF THE FINAL ADDENDUM.
36. PROVIDE TYPED LABEL FOR ALL DUPLEX OUTLETS AND LIGHT SWITCHES TO INDICATE WHICH CIRCUIT THEY ARE TIED TO.
37. INSTALL EXIT SIGNS ON THE WALL IF POSSIBLE.
38. CONTRACT DOCUMENTS SHALL TAKE PRECEDENCE OVER SHOP DRAWINGS UNLESS SPECIFICALLY NOTED OTHERWISE.
39. TO MINIMIZE NUMBER OF FALSE FIRE ALARM DURING CONSTRUCTION, THE CONTRACTOR SHALL CAP SMOKE DETECTORS IN AREAS ADJACENT TO WORK SITE WHILE DUST-GENERATING WORK IS PERFORMED. THESE CAPS SHALL BE REMOVED AT END OF WORKDAY. COORDINATE THE EXTENT OF DEVICE CAPPING REQUIRED WITH CAMPUS FIRE MARSHALL. A LOG SHALL BE KEPT SHOWING THAT ALL CAPS ARE REMOVED AND ACCOUNTED FOR.
40. IF, FOR ANY REASON FIRE ALARM SYSTEM CANNOT BE RETURNED TO SERVICE AT THE END OF WORK DAY THE CAMPUS FIRE MARSHALL MUST BE NOTIFIED. CONTRACTOR SHALL PROVIDE FIRE WATCH AT NO ADDITIONAL COST TO THE OWNER.



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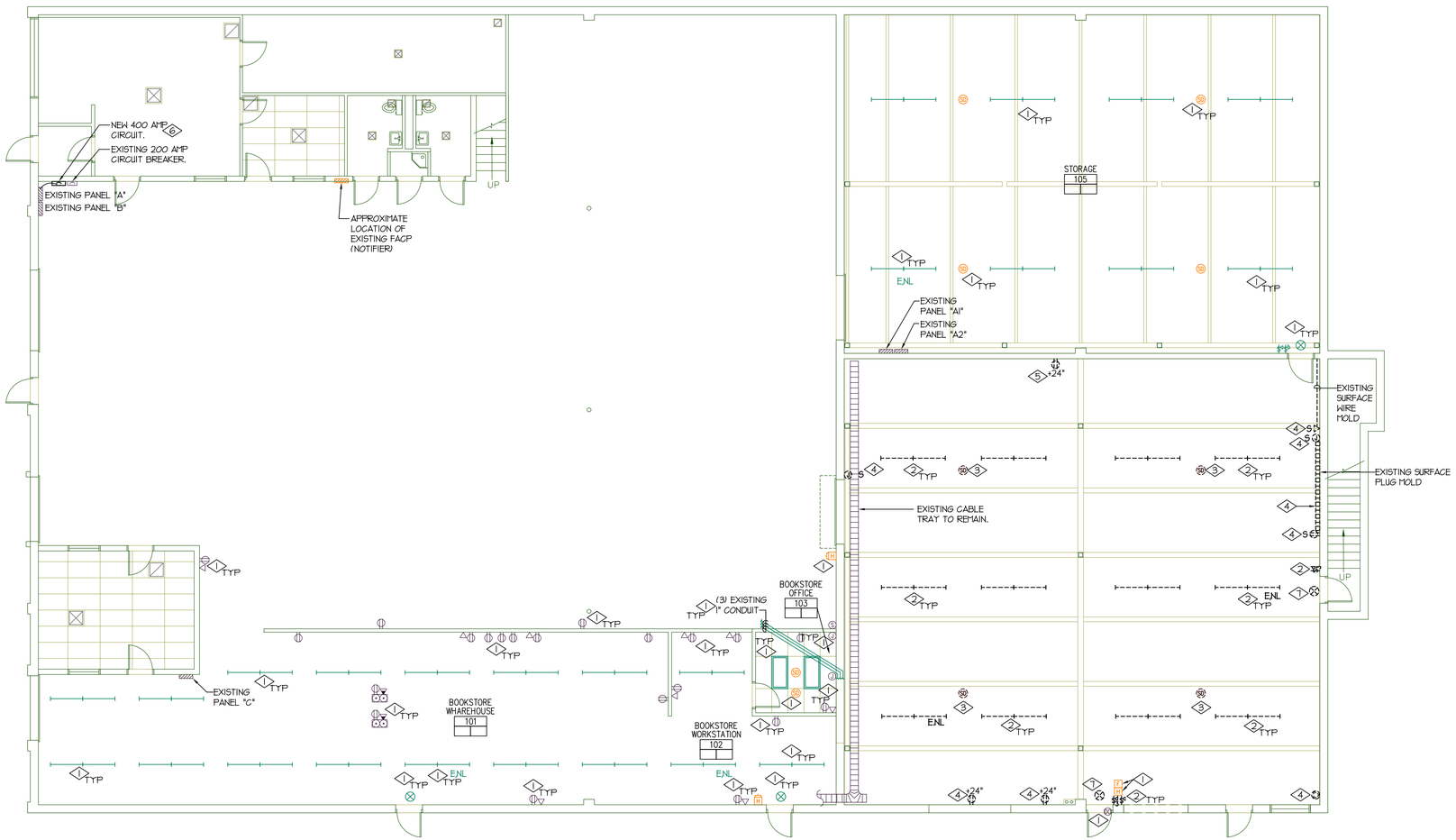
SHEET TITLE

DETAILS, SCHEDULES, SYMBOLS LIST & GENERAL NOTES

EE001

SHEET 13 OF 17



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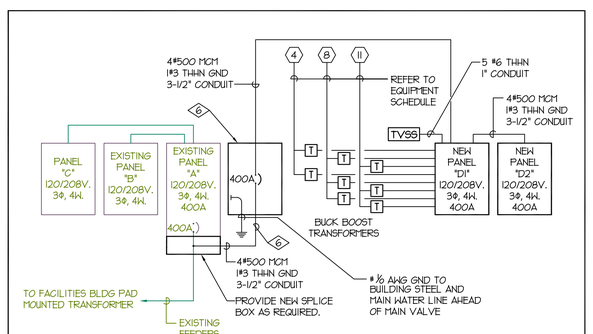
MAIN FLOOR DEMOLITION PLAN – ELECTRICAL

SCALE: 1/8" = 1'-0"

REFERENCE NOTES:

1. EXISTING DEVICES AND LIGHT FIXTURES SHALL REMAIN. MAKE ANY MODIFICATIONS AS REQUIRED TO MAINTAIN CIRCUIT INTEGRITY.
2. RELOCATE THE EXISTING LIGHT FIXTURES TO THE APPROXIMATE LOCATION SHOWN ON EL01. REMOVE ASSOCIATED LIGHT SWITCHES, J-BOXES, CONDUIT, CONDUCTORS, ETC. ALL THE WAY BACK TO THEIR ORIGINATION POINTS. REUSE CONDUIT AS POSSIBLE. REMOVE ANY ABANDONED CONDUIT.
3. RELOCATE THE EXISTING SMOKE DETECTORS TO THE NEW LOCATIONS SHOWN ON SHEET EP01. TRACE CIRCUITS BACK TO NEAREST DEVICE THAT IS TO REMAIN AND FROM THERE EXTEND TO NEW LOCATION.
4. REMOVE THE EXISTING DUPLEX WIRE MOLD, VOICE OUTLETS AND SPECIAL OUTLETS. REMOVE THEIR ASSOCIATED CONDUIT AND CONDUCTORS ALL THE WAY BACK TO ORIGINATION POINTS.
5. REPLACE THE EXISTING FLUSH MOUNTED OUTLETS AND COVER PLATES. EXTEND EXISTING CIRCUITS TO NEW DEVICE.
6. FURNISH AND INSTALL NEW 400 AMP CIRCUIT BREAKER SWITCH IN THE APPROXIMATE LOCATION SHOWN. TAP ON TO THE EXISTING 400 AMP FEEDERS AT EXISTING PANEL "A". TIE THE NEW PANELS "D1" & "D2" TO THE NEW 400 AMP CIRCUIT BREAKER. PROVIDE CONDUIT, CONDUCTORS, PULL BOXES, ETC. FOR A COMPLETE INSTALLATION. REFER TO THE PARTIAL POWER SINGLE LINE DIAGRAM FOR MORE INFORMATION.
7. REMOVE THE EXISTING EXIT SIGNS. REMOVE ASSOCIATED CONDUCTORS ALL THE WAY BACK TO ORIGINATION POINTS. REUSE CONDUIT AS POSSIBLE. REMOVE ANY ABANDONED CONDUIT AND J-BOXES.



SCALE: N.T.S.

PARTIAL POWER SINGLE LINE DIAGRAM

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MARK	DATE	DESCRIPTION

DATE:	
AGENCY PROJECT NO:	
HFSA PROJECT NO:	
CAD DWG FILE NO:	
DRAWN BY:	JLB
CHECKED BY:	
DESIGNED BY:	
DWG TYPE:	
ARCHITECTURAL PHASE:	

SHEET TITLE

MAIN FLOOR DEMOLITION PLAN ELECTRICAL

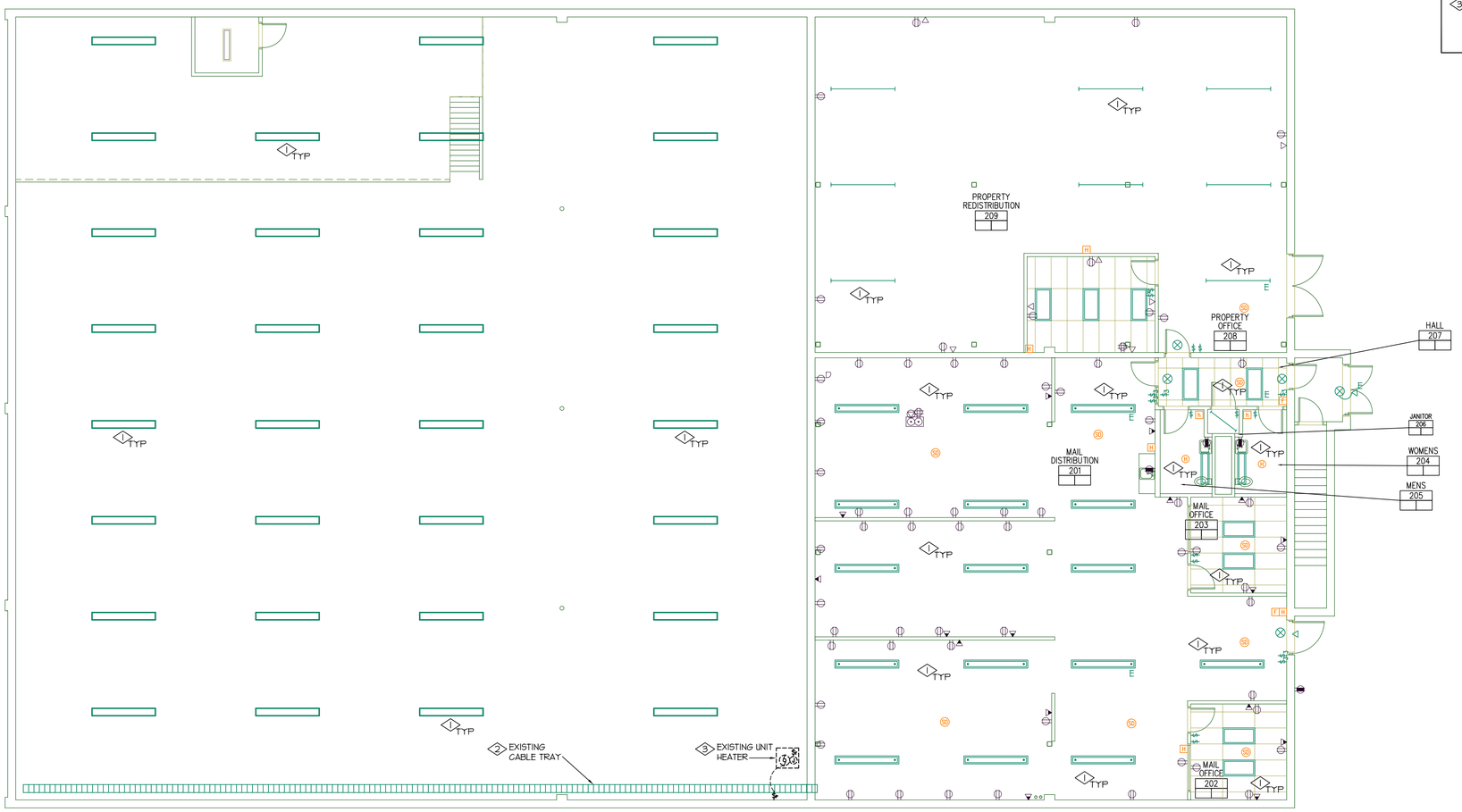
ED101

SHEET 14 OF 17

3211

REFERENCE NOTES:

1. EXISTING DEVICES AND LIGHT FIXTURES SHALL REMAIN. MAKE ANY MODIFICATIONS AS REQUIRED TO MAINTAIN CIRCUIT INTEGRITY.
2. EXISTING CABLE TRAY TO REMAIN.
3. EXISTING HEATER SHALL BE RELOCATED BY MECHANICAL CONTRACTOR. DISCONNECT POWER AND EXTEND ASSOCIATED CONDUIT, CONDUCTORS, ETC. TO THE NEW LOCATION AS SHOWN ON SHEET EP102. COORDINATE THIS WORK WITH MECHANICAL CONTRACTOR.



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UPPER FLOOR DEMOLITION PLAN – ELECTRICAL

SCALE: 1/8" = 1'-0"

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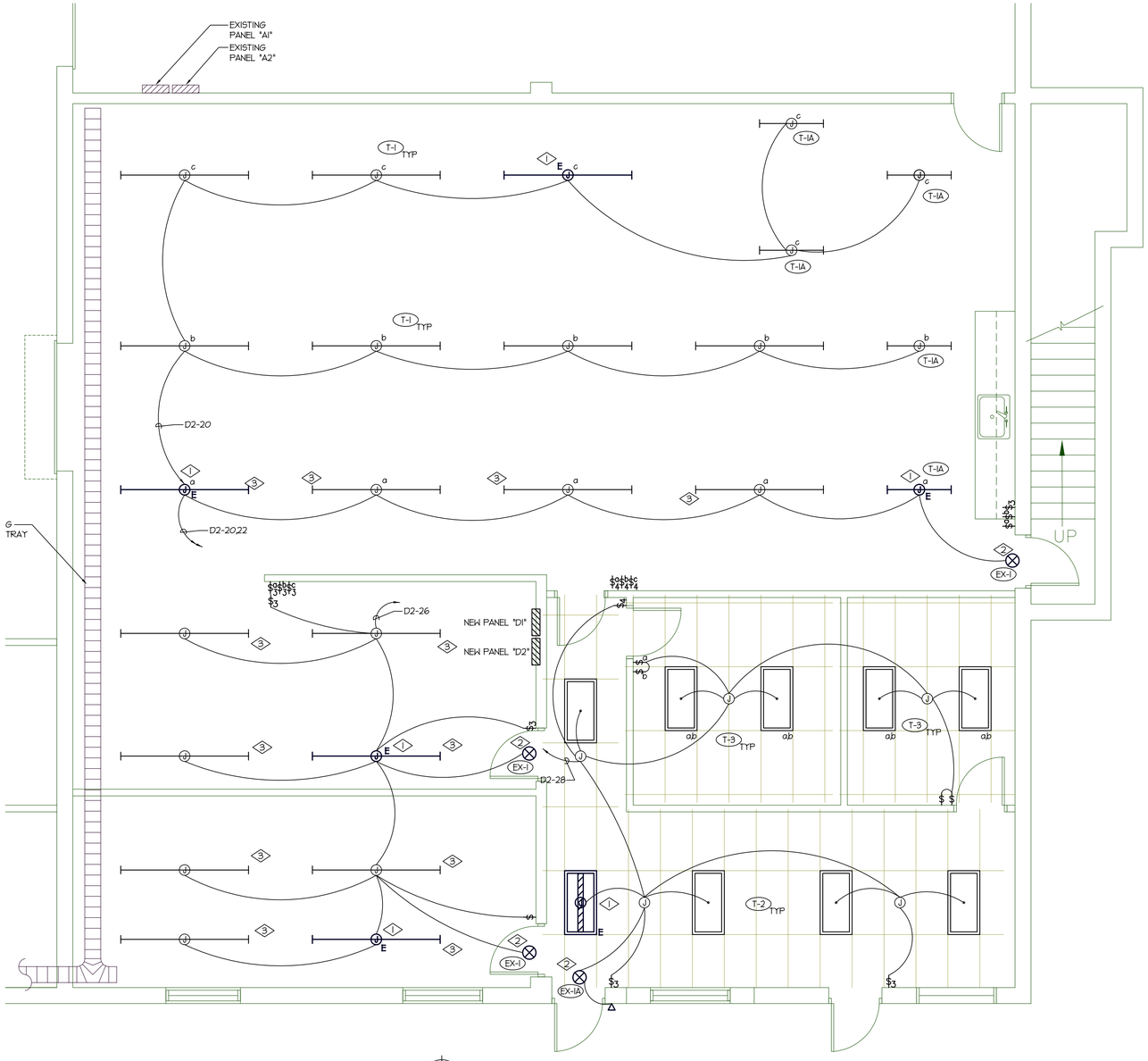
SHEET TITLE

UPPER FLOOR DEMOLITION PLAN ELECTRICAL

ED102

SHEET 15 OF 17

3211



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PARTIAL MAIN FLOOR PLAN – LIGHTING

SCALE: 1/4" = 1'-0"

REFERENCE NOTES:

1. EMERGENCY LIGHT FIXTURE INDICATED WITH LETTER "E" SHALL BE PROVIDED WITH A 90 MINUTE BATTERY BACK UP TIED TO CENTER LAMP AND SHALL PROVIDE 1100 LUMENS. PROVIDE UNSWITCHED LIGHTING CIRCUIT TO THE BATTERY PACK TO TURN ON CENTER LAMP UPON COMMERCIAL POWER FAILURE.
2. FURNISH AND INSTALL NEW EXIT SIGNS IN THE APPROXIMATE LOCATION SHOWN. TIE TO UNSWITCHED LIGHTING CIRCUIT.
3. INSTALL THE EXISTING LIGHT FIXTURES IN THE APPROXIMATE LOCATION SHOWN. TIE TO THE CIRCUIT INDICATED THROUGH NEW LIGHT SWITCHES. PROVIDE NEW LAMPS IN THE RELOCATED FIXTURES. PROVIDE NEW CHAIN HANG KITS AS REQUIRED.

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DESIGNED BY:	
DWG TYPE:	
ARCHITECTURAL PHASE:	

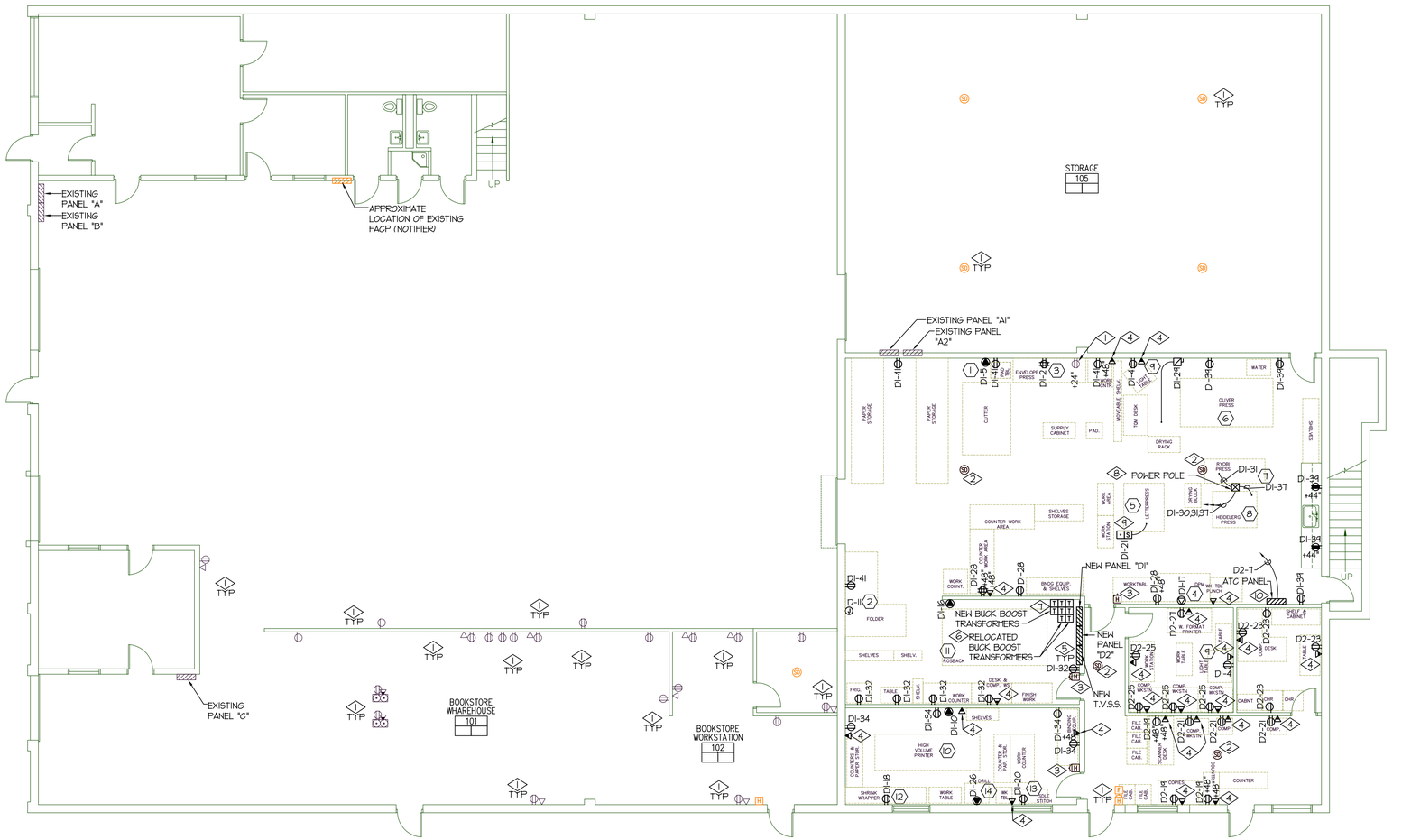
SHEET TITLE

PARTIAL MAIN FLOOR PLAN LIGHTING

EL101

SHEET 16 OF 17

3211



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MAIN FLOOR PLAN – ELECTRICAL

SCALE: 1/8" = 1'-0"

REFERENCE NOTES:

1. EXISTING DEVICES AND LIGHT FIXTURES SHALL REMAIN. MAKE ANY MODIFICATIONS AS REQUIRED TO MAINTAIN CIRCUIT INTEGRITY.
2. INSTALL EXISTING SMOKE DETECTORS IN THE APPROXIMATE LOCATION SHOWN IN THE CEILING. EXTEND EXISTING CONDUIT AND CONDUCTORS TO THE NEW LOCATION FOR A COMPLETE INSTALLATION. COORDINATE EXACT LOCATIONS WITH DUCTWORK AND LIGHT FIXTURES. DO NOT SPLICE THE CONDUCTORS BETWEEN FIRE ALARM DEVICES.
3. FURNISH AND INSTALL NEW HORN/STROBES IN THE APPROXIMATE LOCATION SHOWN. TIE TO THE EXISTING FIRE ALARM SYSTEM. PROVIDE ADDITIONAL POWER SUPPLIES, CONDUIT, CONDUCTORS, ETC. AS REQUIRED FOR A COMPLETE INSTALLATION.
4. FURNISH AND INSTALL A 4" SQUARE X 2-1/8" J-BOX WITH SINGLE GANG MUD RING IN THE APPROXIMATE LOCATION SHOWN FOR VOICE/DATA OUTLET. RUN A 1" CONDUIT FROM J-BOX TO THE NEAREST EXISTING CABLE TRAY. INSERT A PULL STRING AND LABEL CONDUIT AT CABLE TRAY WITH DEVICE LOCATION. DO NOT EXCEED MORE THAN (2)90° BENDS BETWEEN PULL BOXES.
5. FURNISH AND INSTALL NEW PANELBOARDS IN THE APPROXIMATE LOCATION SHOWN. REFER TO THE PARTIAL POWER SINGLE LINE DIAGRAM ON SHEET E0101 FOR MORE INFORMATION.
6. INSTALL EXISTING BUCK/BOOST TRANSFORMER ON THE WALL IN THE APPROXIMATE LOCATIONS SHOWN. RUN CIRCUITS FROM EQUIPMENT #8 & #11 THROUGH THE NEW TRANSFORMERS. EXISTING TRANSFORMERS ARE LOCATED IN HSU BUILDING NO. 2. COORDINATE WITH OWNER FOR REMOVAL OF TRANSFORMERS. CONTRACTOR SHALL DISCONNECT POWER FROM TRANSFORMER AND REMOVE FROM BUILDING.
7. FURNISH AND INSTALL NEW 5 KVA BUCK/BOOST 208/240V TRANSFORMERS ON THE WALL IN THE APPROXIMATE LOCATIONS SHOWN. RUN CIRCUIT FOR EQUIPMENT #4 THROUGH THE NEW TRANSFORMER.
8. FURNISH AND INSTALL NEW ALUMINUM POWER POLE IN THE APPROXIMATE LOCATION SHOWN (WIRE MOLD #AMDTP OR APPROVED EQUAL) WITH (2) DUPLEX RECEPTACLES AND FLEXIBLE WHIPS TO FEED EQUIPMENT #1 & #8. PROVIDE PROPER COVER PLATES.
9. FURNISH AND INSTALL UNISTRUT SUPPORT FOR NEW STARTER FOR EQUIPMENT #5. RUN CONDUITS FROM CEILING DOWN TO STARTER. REFER TO THE DETAILS FOR MORE INFORMATION. FURNISH NEW EMERGENCY STOP SWITCH ON TOP OF STARTER. TIE TO THE STARTER FOR EMERGENCY DISCONNECT OF EQUIPMENT.
10. TIE THE TEMPERATURE CONTROL PANEL TO THE CIRCUIT INDICATED. COORDINATE EXACT LOATION WITH MECHANICAL CONTRACTOR.
11. FURNISH AND INSTALL A NEW TVSS IN APPROXIMATE LOCATION SHOWN. TIE TO 60 AMP, CIRCUIT BREAKER IN PANEL D1. REFER TO SPECIFICATION AND POWER SINGLE LINE DIAGRAM FOR MORE INFORMATION.

PANEL	"D1"					AIC RATING	10K		AMPS	NQOD, 3-PHASE, 4W	
PHASE / WIRE	3 / 4					RATING	120 / 208		VOLTS	RECESSED	
MAIN LUG	400	AMPS				SUBFEED LUGS			YES	FOR PANEL "D2"	
MAIN BREAKER		AMPS				COMMENT					

CKT	LOCATION	RECEPT	LTG	OTHER	POLE	SIZE	PHASE	SIZE	POLE	OTHER	LTG	RECEPT	LOCATION	CKT
1				1296			A	20	1	1680			EQUIP #3 CONVEYOR	2
3				1296			B	20	1	480			EQUIP #9 LIGHT TABLE	4
5	EQUIP. #1 CUTTER			1296	3	20	C			2880				6
7				2520			A			2880				8
9				2520			B	30	3	2880			EQUIP. #10 IR 110	10
11	EQUIP. #2 FOLDER			2520	3	30	C			1548				12
13	SPARE				1	20	A			1548				14
15				1500			B	20	3	1548			EQUIP. #11 ROSSBACK	16
17	EQUIP. #4 DPM			1500	2	20	C	20	1	1800			EQUIP #12 SHRINKWRAP	18
19				1140			A	20	1	1600			EQUIP #13 BOOK STITCH	20
21	EQUIP. #5 LETTERPRESS			1140	2	20	B			1440				22
23				5280			C			1440				24
25				5280			A	20	3	1440			EQUIP #14 HOLE DRILL	26
27	EQUIP. #6 OLIVER			5280	3	60	B	20	1			800	PRINT SHOP C.O.	28
29				1020			C	20	1			400	PRINT SHOP C.O.	30
31	EQUIP. #7 RYOBI			1020	2	20	A	20	1			1000	PRINT SHOP C.O.	32
33				1572			B	20	1			800	HIGH VOLUME C.O.	34
35				1572			C	20	1				SPARE	36
37	EQUIP #8 HYDELBERG			1572	3	20	A							38
39	PRINT SHOP C.O.	1000			1	20	B							40
41	PRINT SHOP C.O.	600			1	20	C	60	3				T.V.S.S.	42
		VA	VA	VA		AMPS		KVA		VA	VA	VA		
		1	0	12828	A	191.5	A	22.98	A	9148	0	1000		
		1000	0	13308	B	185.5	B	22.26	B	6348	0	1600		
		600	0	13188	C	182.1	C	21.86	C	7668	0	400		
		1600	0	39324		186.2	TOTAL	67.09		23164	0	3000		

PANEL	"D2"					AIC RATING	10K		AMPS	NQOD, 3-PHASE, 4W	
PHASE / WIRE	3 / 4					RATING	120 / 208		VOLTS	RECESSED	
MAIN LUG	400	AMPS				SUBFEED LUGS			NO		
MAIN BREAKER		AMPS				COMMENT					

CKT	LOCATION	RECEPT	LTG	OTHER	POLE	SIZE	PHASE	SIZE	POLE	OTHER	LTG	RECEPT	LOCATION	CKT
1				3362			A			16812				2
3				3362			B			16812				4
5	ROOF TOP UNIT RTU-1			3362	3	40	C	175	3	16812			ROOF TOP UNIT RTU-2	6
7	ATC PANEL			300	1	20	A	20	1				SPARE	8
9	SPARE				1	20	B	20	1				SPARE	10
11	SPARE				1	20	C	20	1				SPARE	12
13	SPARE				1	20	A	20	1				SPARE	14
15	SPARE				1	20	B	20	1				SPARE	16
17	SPARE				1	20	C	20	1				SPARE	18
19	SALES ROOM C.O.	400			1	20	A	20	1		1260		PRINT SHOP LTG	20
21	SALES ROOM C.O.	800			1	20	B	20	1		630		PRINT SHOP LTG	22
23	OFFICE C.O.	800			1	20	C	20	1				SPARE	24
25	PRINT LAYOUT C.O.	800			1	20	A	20	1		1120		PRINT SHOP/HIGH VOL	26
27	PRINT LAYOUT C.O.	200			1	20	B	20	1		900		OFFICE LIGHTING	28
29	SPARE				1	20	C	20	1				SPARE	30
31	SPARE				1	20	A	20	1				SPARE	32
33	SPARE				1	20	B	20	1				SPARE	34
35	SPARE				1	20	C	20	1				SPARE	36
37	SPARE				1	20	A	20	1				SPARE	38
39	SPARE				1	20	B	20	1				SPARE	40
41	SPARE				1	20	C	20	1				SPARE	42
		VA	VA	VA		AMPS		KVA		VA	VA	VA		
		1200	0	3662	A	200.5	A	24.05	A	16812	2380	0		
		1000	0	3362	B	189.2	B	22.7	B	16812	1530	0		
		800	0	3362	C	174.8	C	20.97	C	16812	0	0		
		3000	0	10386		188	TOTAL	67.73		50436	3910	0		

EQUIPMENT SCHEDULE

EQUIP. NO.	EQUIPMENT NAME	ELECTRICAL CHARACTERISTIC							COMMENTS
		VOLTS	PHASE	AMPS	HP	KW	WIRE SIZE	CONDUIT SIZE	CONNECTOR TYPE	
1	CUTTER	208	3	10.8	--	--	3 #12	3/4"	J-BOX	HARDWIRED
2	FOLDER	208	3	21	--	--	3 #10	3/4"	J-BOX	HARDWIRED
3	PRESS WITH CONVEYOR	120	1	14	--	--	2 #12	3/4"	4-PLEX	CORD & PLUG
4	PLATESTREAM DPM	240	1	12.5	--	3	3 #12	3/4"	NEMA	CORD & PLUG THROUGH NEW 5KVA BUCK BOOST TRANSFORMERS
5	LETTER PRESS HYDELBERG	208	1	9.5	--	--	3 #12	3/4"	STARTER	PROVIDE EMERGENCY STOP SWITCH
6	LARGE OLIVER PRESS	208	3	44	--	--	3 #6	3/4"	60 A. DISCONNECT	60 AMP FUSES
7	RO'YBI PRESS	220	1	8.5	--	--	3 #12	3/4"	POWER POLE	HARDWIRED
8	HYDELBERG PRESS	240	3	13.1	--	3	3 #12	3/4"	POWER POLE	HARDWIRED, RELOCATE EXISTING (3) 5 KVA BUCK BOOST TRANSFORMERS
9	LIGHT TABLE	120	1	2	--	--	2 #12	3/4"	DUPLEX	CORD & PLUG
10	IR 110 PRINTER	208	3	24	--	--	3 #10	3/4"	NEMA L21-30	CORD & PLUG
11	ROSBACK STITCHER	240	3	12.9	--	--	3 #12	3/4"	NEMA L-14R	CORD & PLUG, RELOCATE EXISTING (3) 7.5 KVA BUCK BOOST TRANSFORMERS
12	SRINK WRAPPER	120	1	15	--	--	2 #12	3/4"	DUPLEX	CORD & PLUG
13	BOOK STITCHER	120	1	--	--	--	2 #12	3/4"	DUPLEX	CORD & PLUG
14	3 HOLE DRILL	208	3	12	--	--	3 #12	3/4"	NEMA	CORD & PLUG

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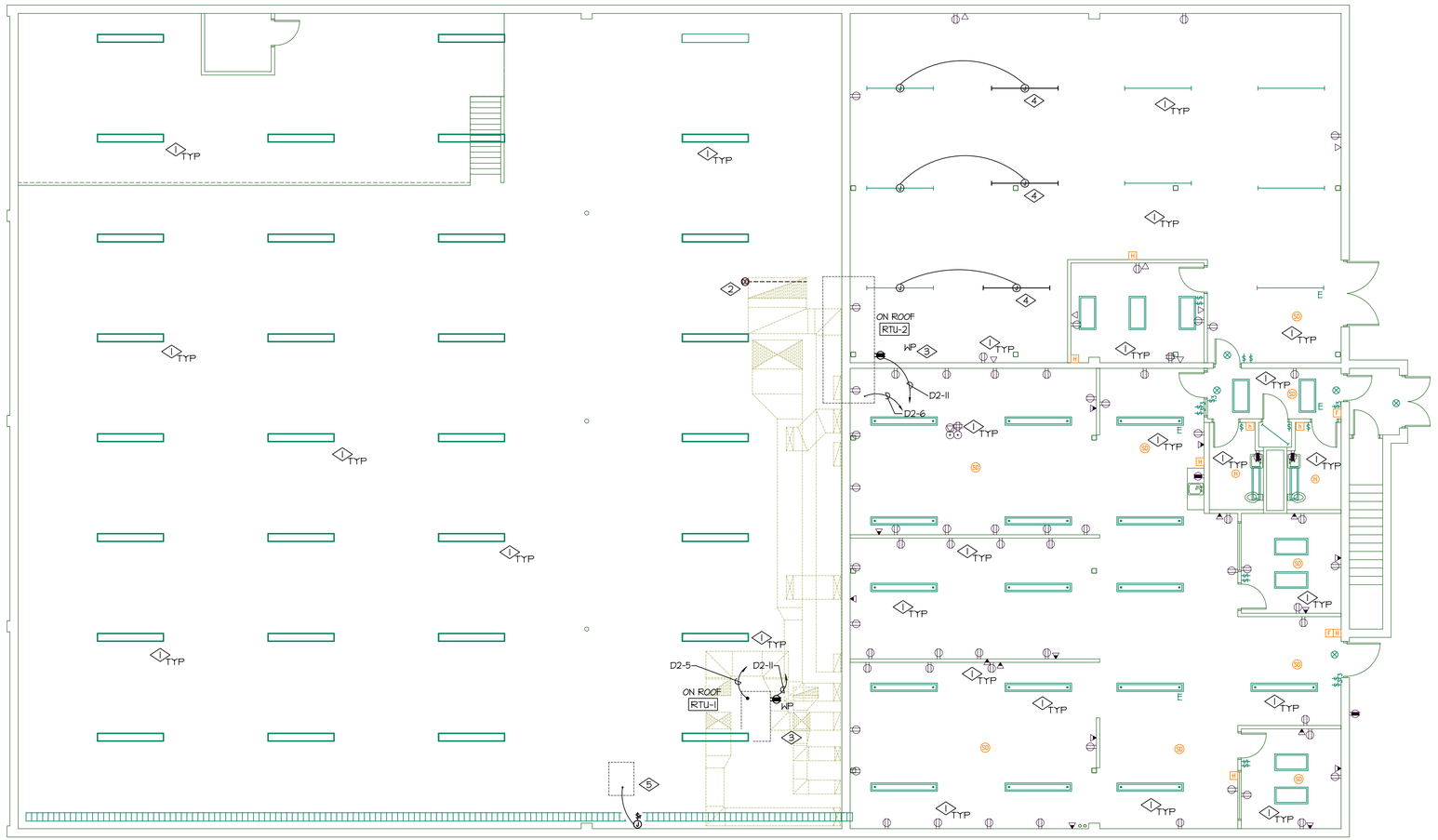
MAIN FLOOR PLAN ELECTRICAL

EP101

SHEET 17 OF 17

3211



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UPPER FLOOR PLAN – ELECTRICAL

SCALE: 1/8" = 1'-0"

REFERENCE NOTES:

1. EXISTING DEVICES AND LIGHT FIXTURES SHALL REMAIN. MAKE ANY MODIFICATIONS AS REQUIRED TO MAINTAIN CIRCUIT INTEGRITY.
2. FURNISH AND INSTALL A NEW DUCT SMOKE DETECTOR WITH SAMPLING TUBE IN THE RETURN AIR DUCT. TIE THE DUCT DETECTOR TO THE NEAREST FIRE ALARM LOOP. IN AND OUT CIRCUITS SHALL BE IN SEPARATE CONDUITS. TIE THE ASSOCIATED AIR HANDLER TO FIRE ALARM SYSTEM FOR AUTOMATIC SHUT DOWN UPON ALARM. PROVIDE CONDUIT, CONDUCTORS, RELAYS, PROGRAMMING, ETC. FOR A COMPLETE INSTALLATION.
3. TIE THE OUTLET FURNISHED WITH THE UNIT TO THE CIRCUIT INDICATED.
4. INSTALL THREE (3) OF THE LIGHT FIXTURES REMOVED FROM THE FIRST FLOOR IN THE APPROXIMATE LOCATIONS SHOWN. TIE TO THE CIRCUIT FEEDING EXISTING LIGHT FIXTURE SHOWN. PROVIDE CONDUIT, CONDUCTORS, HANGERS, ETC. FOR A COMPLETE INSTALLATION.
5. NEW LOCATION OF EXISTING UNIT HEATER. EXTEND EXISTING CONDUIT, J-BOX, THERMAL SWITCH AND CONDUCTORS TO THE NEW LOCATION FOR A COMPLETE INSTALLATION.

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ELECTRICAL

EP102

SHEET 18 OF 17

3211